

Appendix B Afor KSEM210800130602

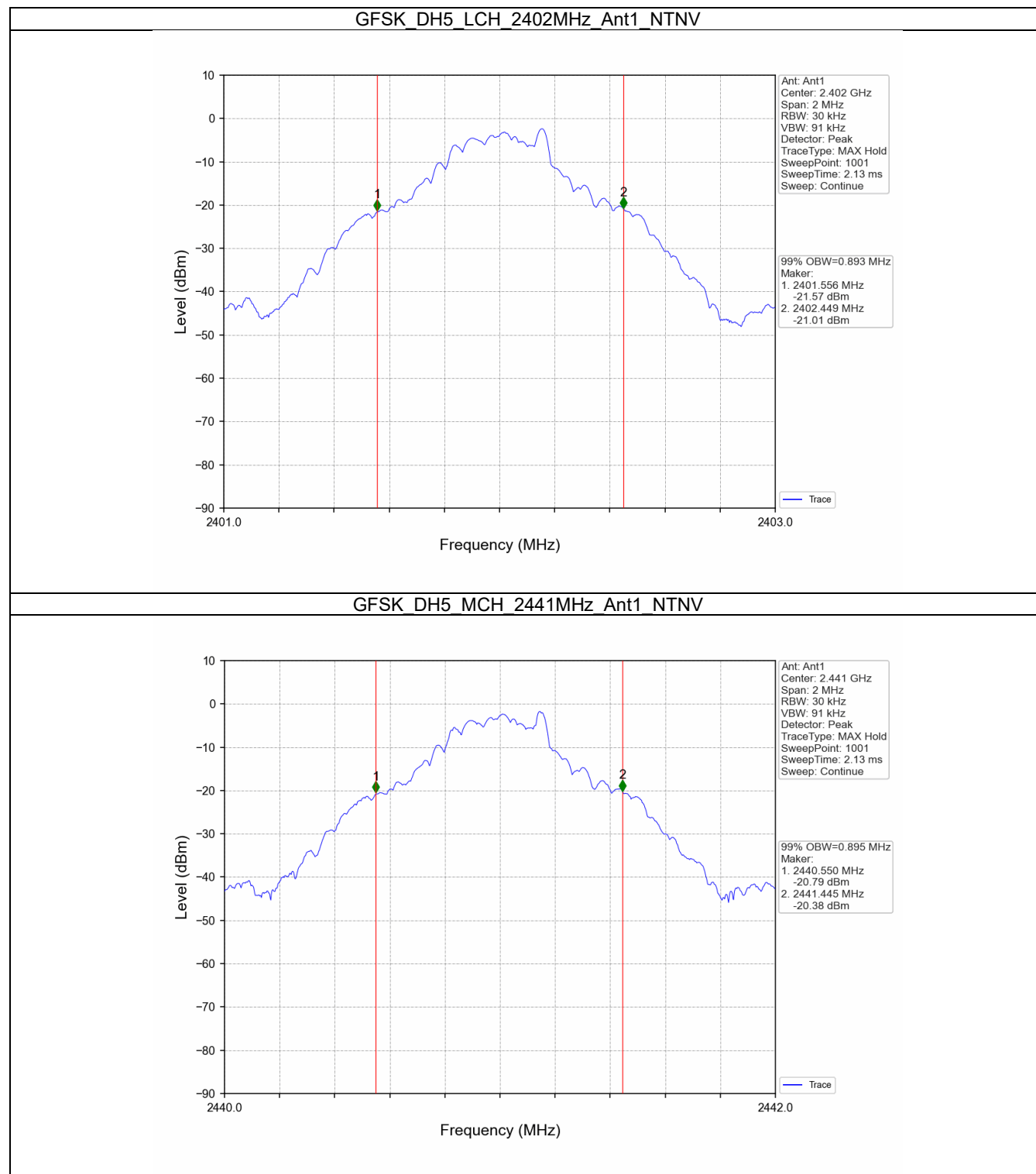
1. Bandwidth

1.1 OBW

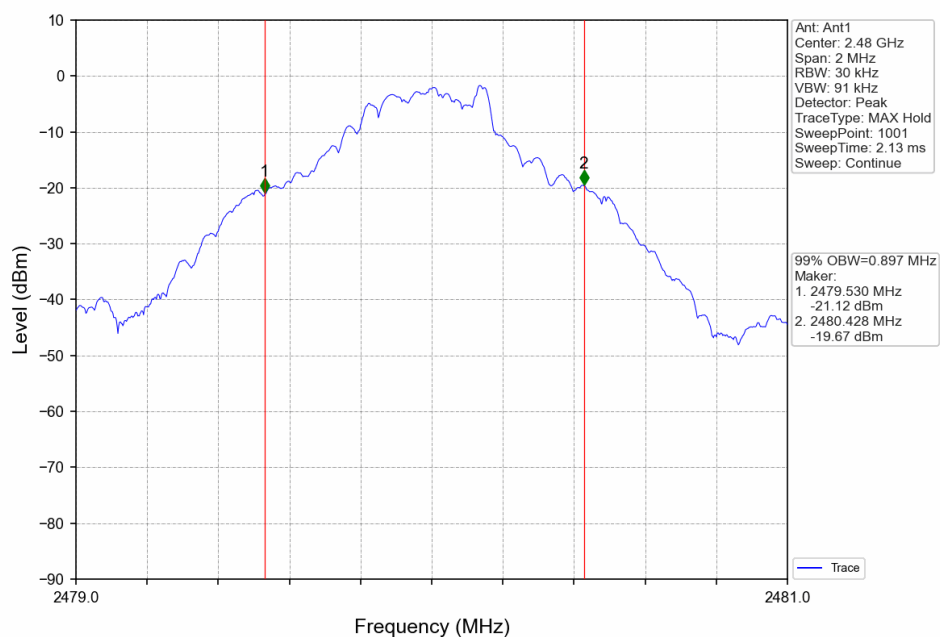
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Ant	99% Occupied Bandwidth (MHz)	Verdict
					Result	
GFSK	SISO	2402	DH5	1	0.893	Pass
		2441	DH5	1	0.895	Pass
		2480	DH5	1	0.897	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.191	Pass
		2441	2DH5	1	1.191	Pass
		2480	2DH5	1	1.188	Pass
8DPSK	SISO	2402	3DH5	1	1.189	Pass
		2441	3DH5	1	1.189	Pass
		2480	3DH5	1	1.191	Pass

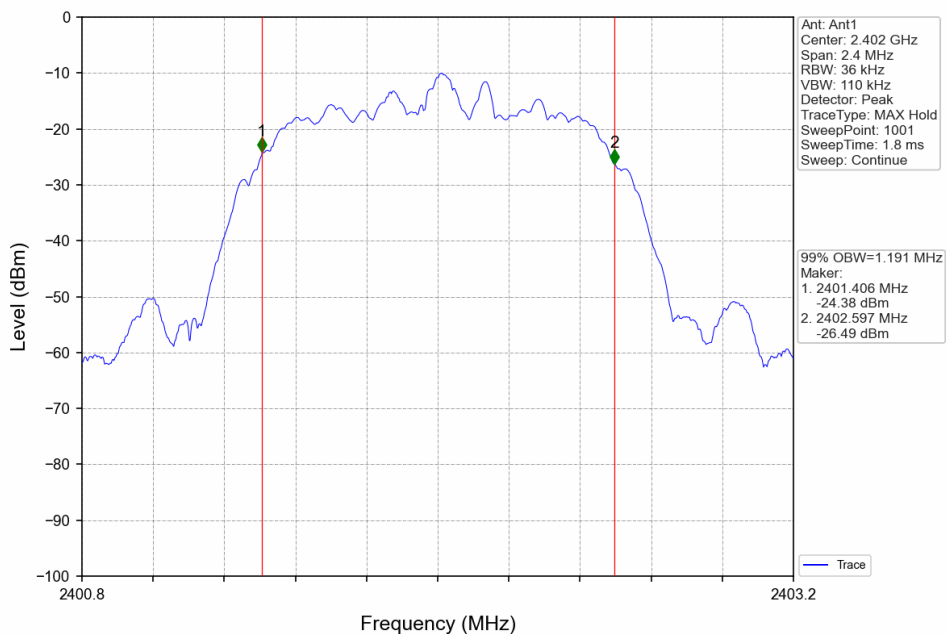
1.1.2 Test Graph



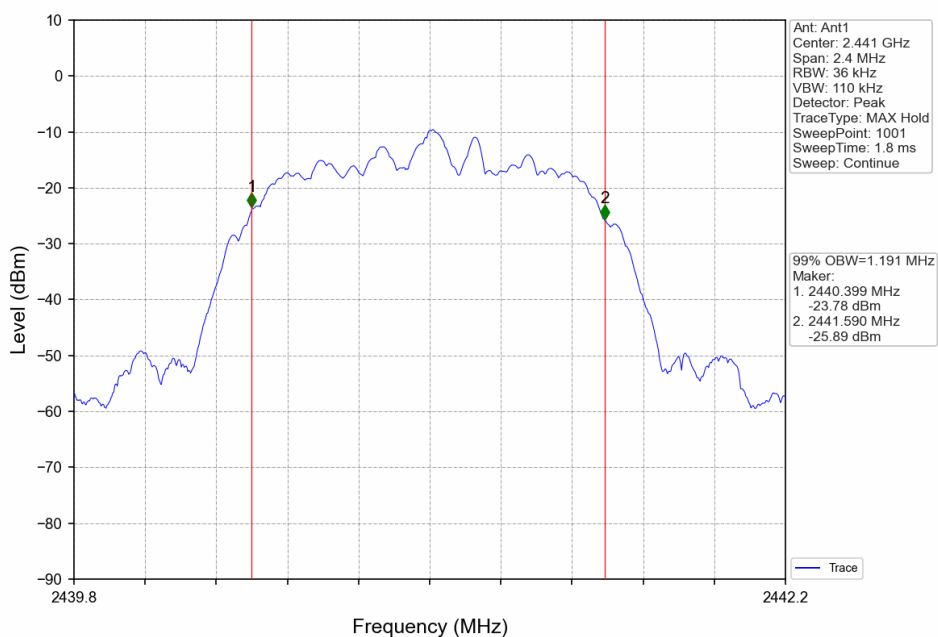
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



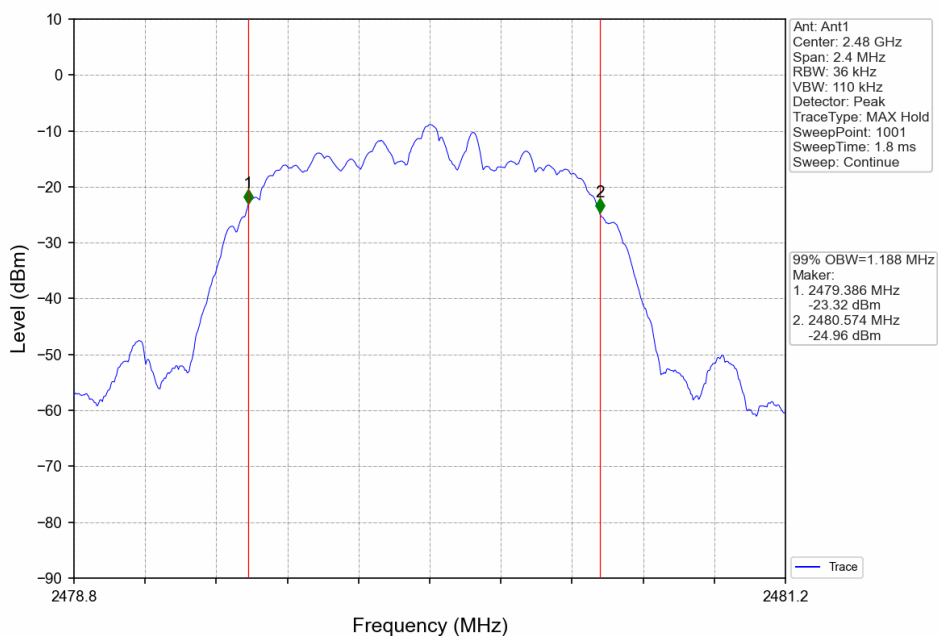
PI/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



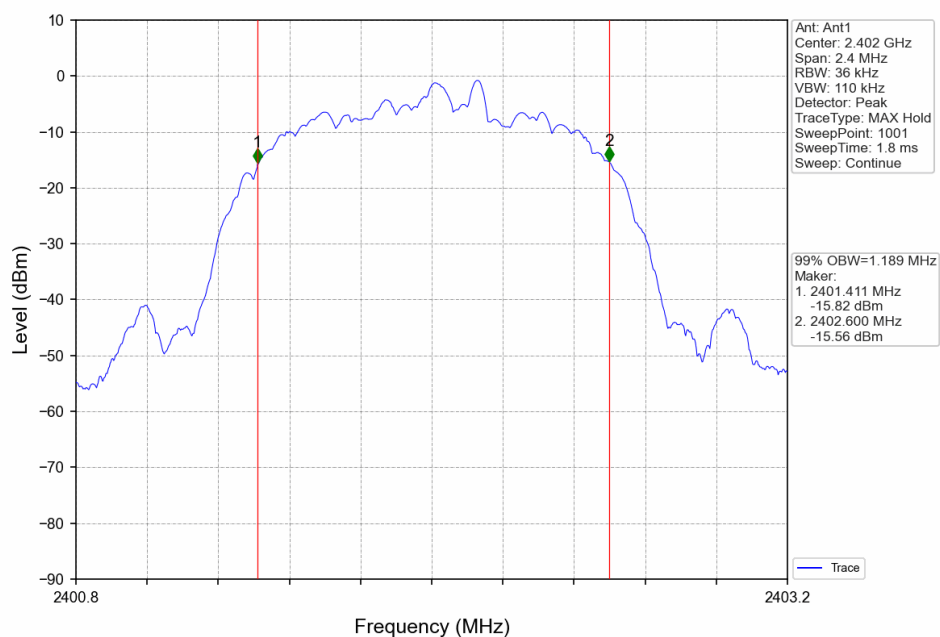
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



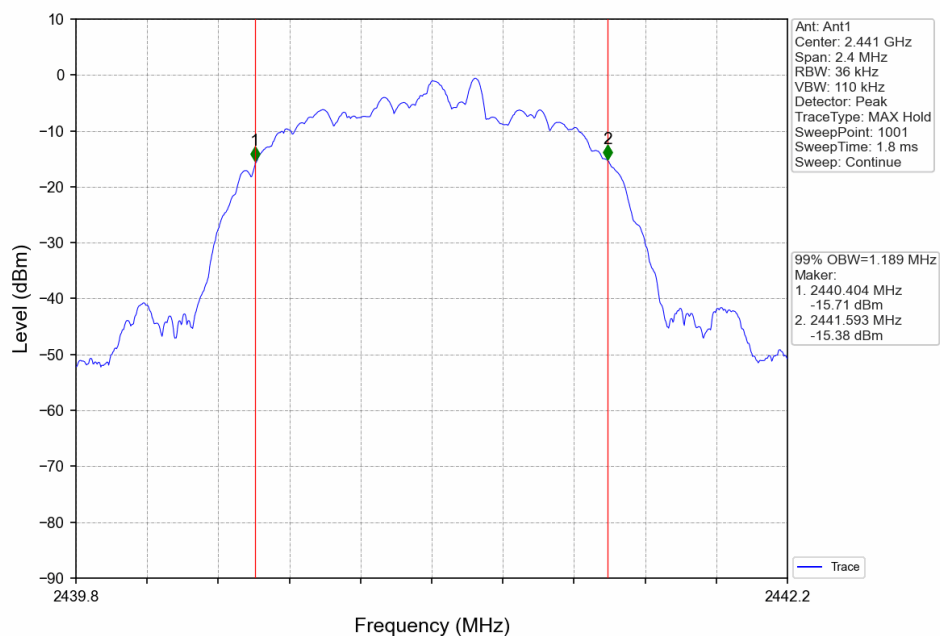
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

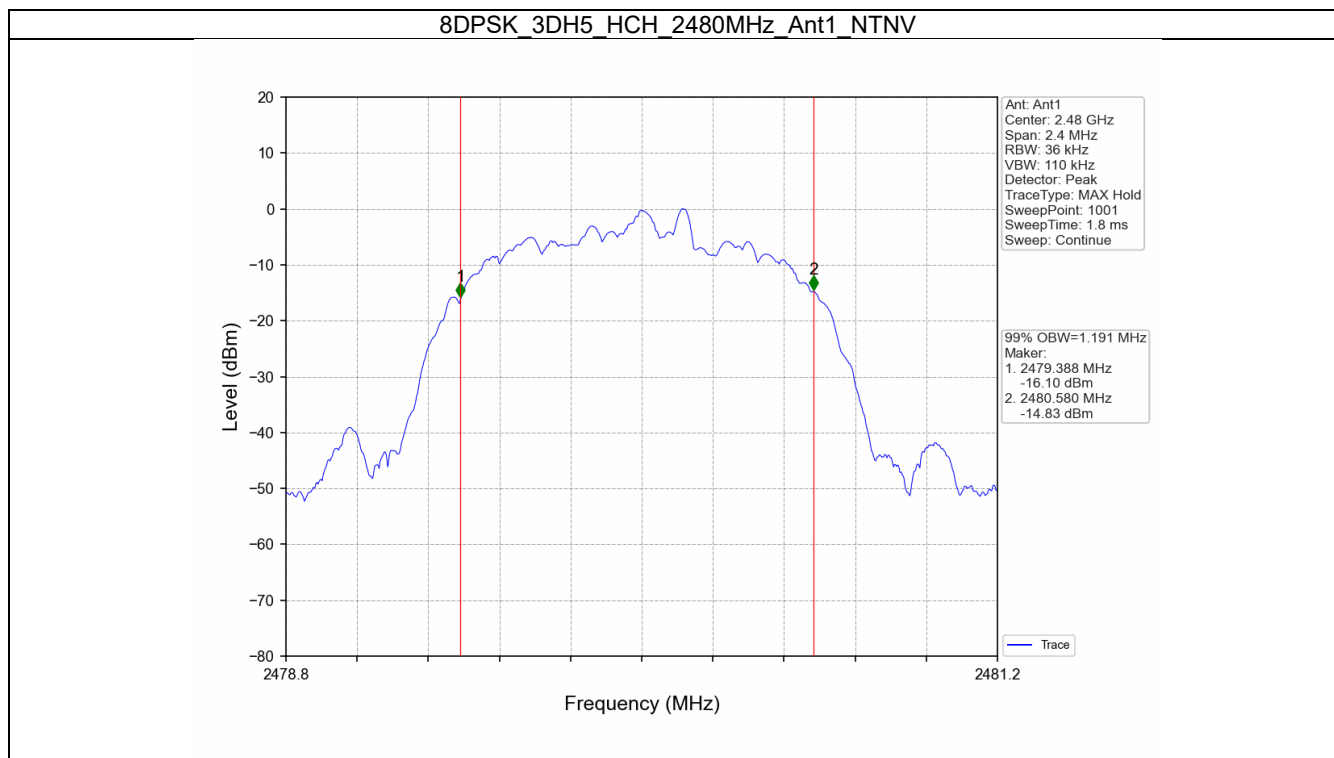


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



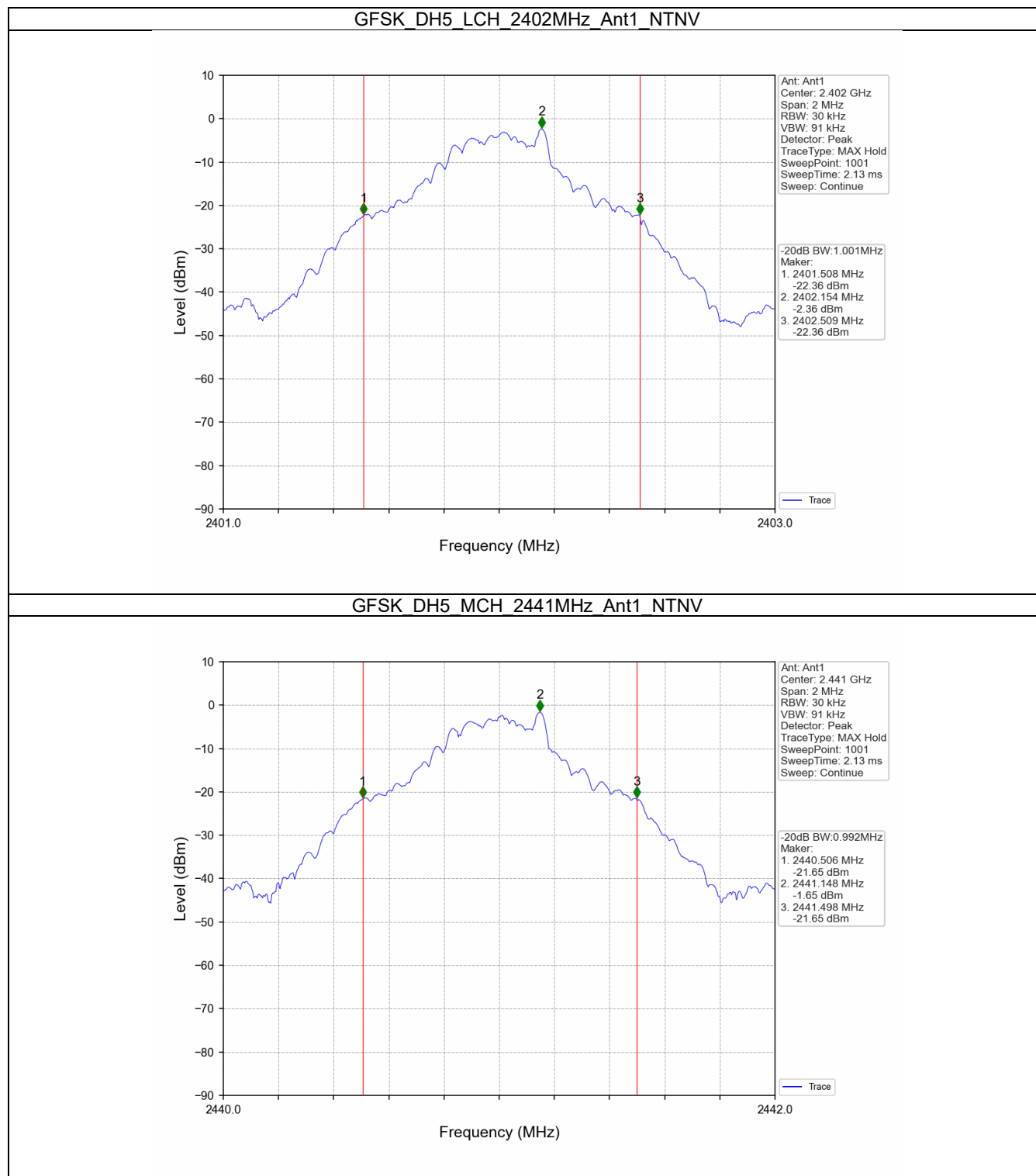


1.2 20dB BW

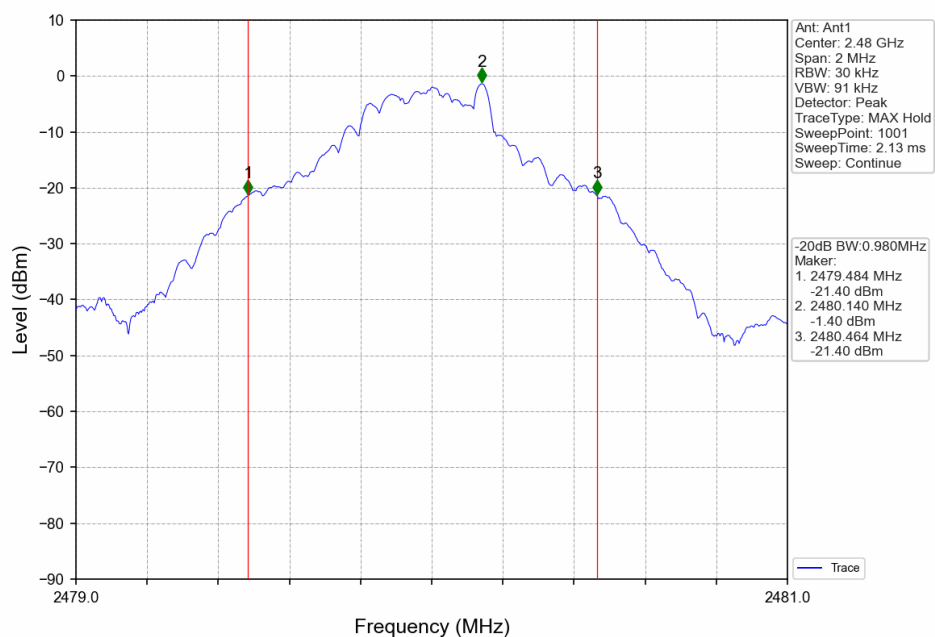
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Ant	20dB Bandwidth (MHz)	Verdict
					Result	
GFSK	SISO	2402	DH5	1	1.001	Pass
		2441	DH5	1	0.992	Pass
		2480	DH5	1	0.980	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.336	Pass
		2441	2DH5	1	1.333	Pass
		2480	2DH5	1	1.335	Pass
8DPSK	SISO	2402	3DH5	1	1.317	Pass
		2441	3DH5	1	1.314	Pass
		2480	3DH5	1	1.317	Pass

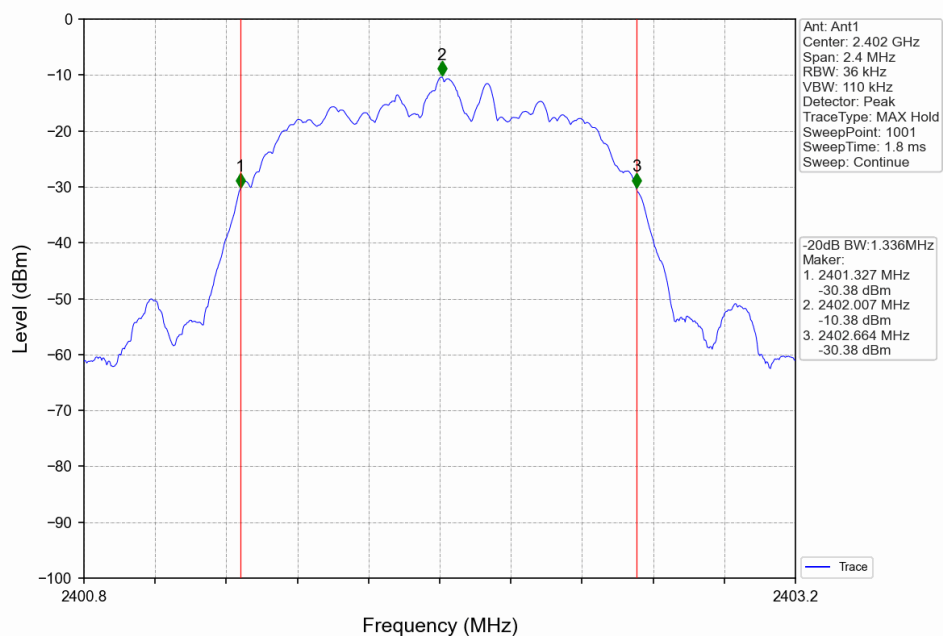
1.2.2 Test Graph



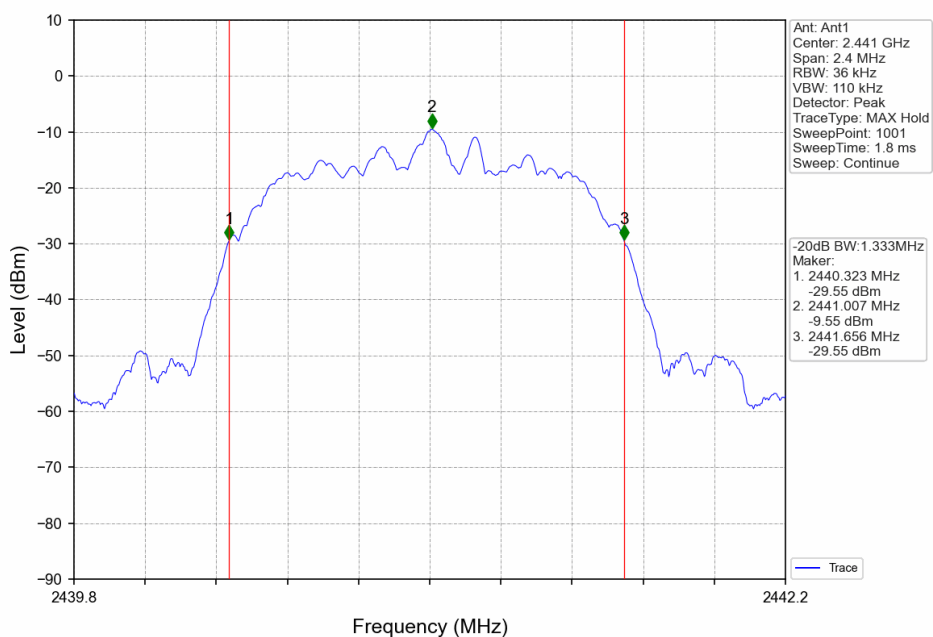
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



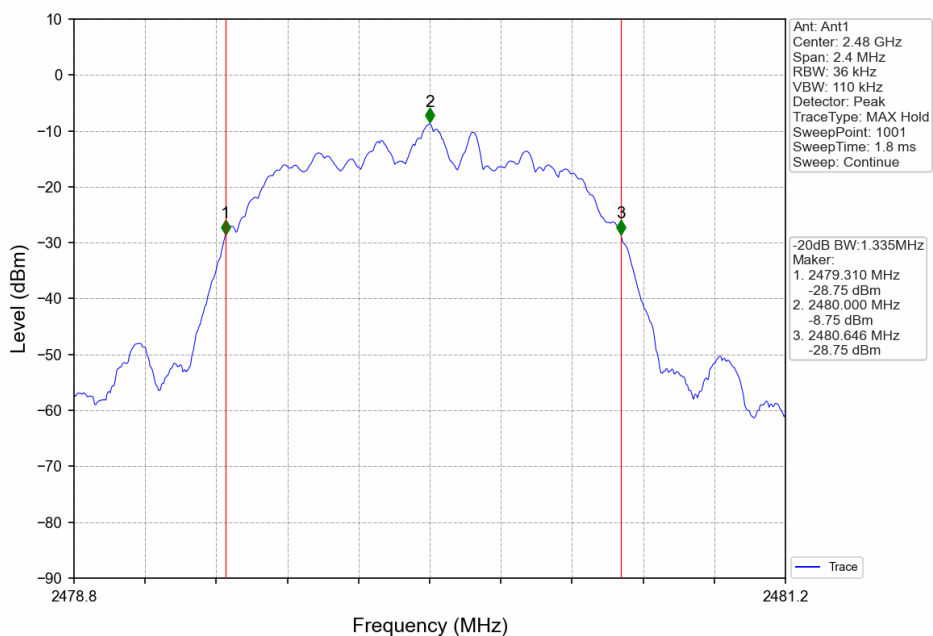
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



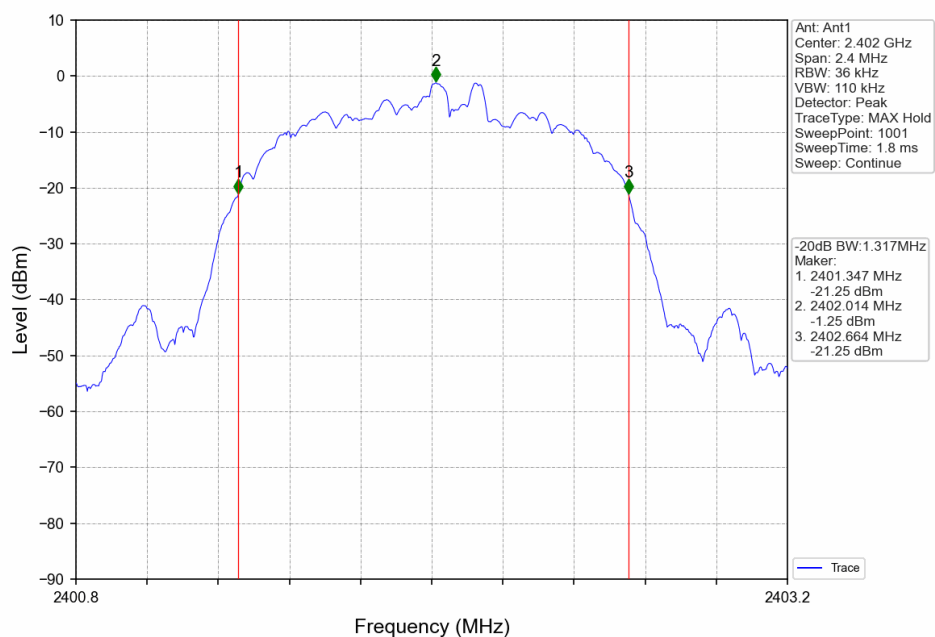
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



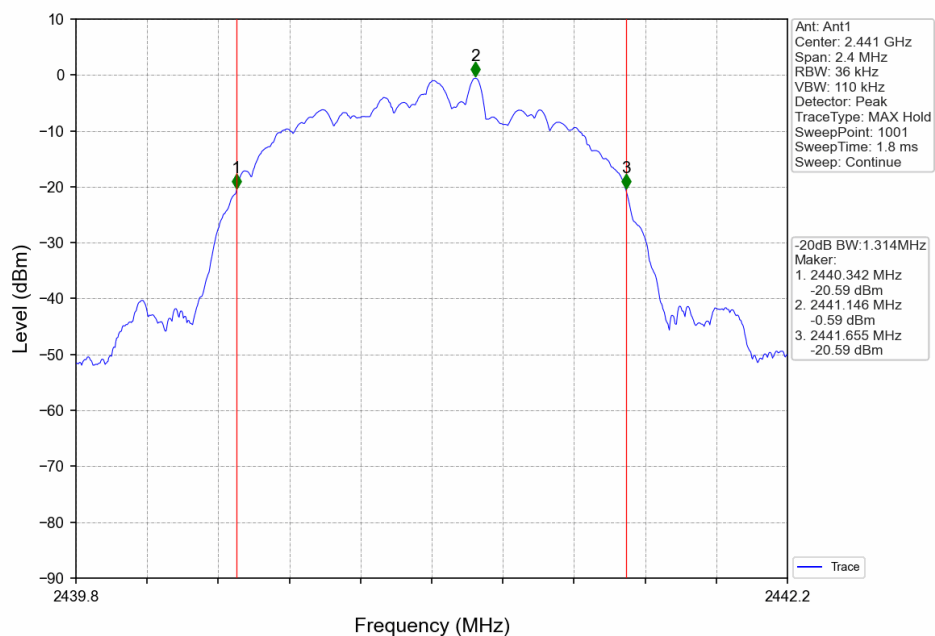
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

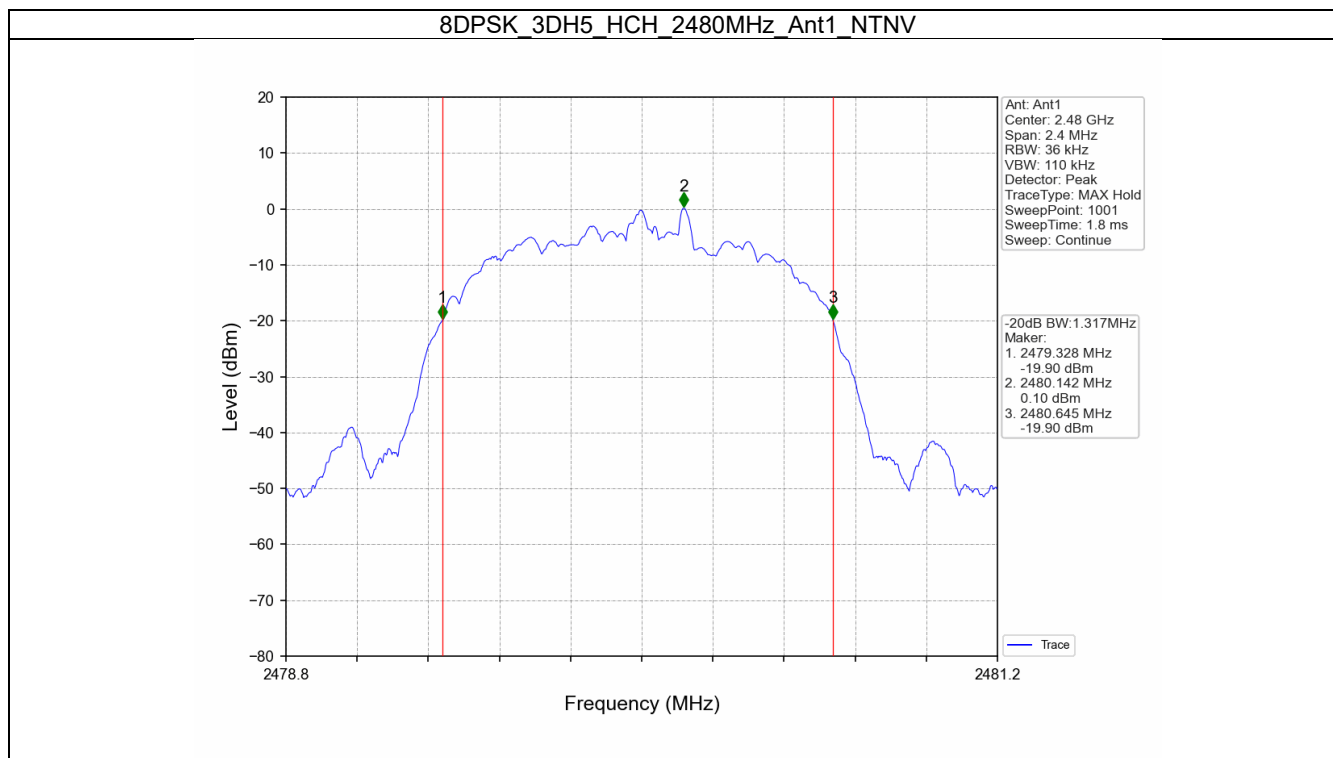


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV





2. Maximum Conducted Output Power

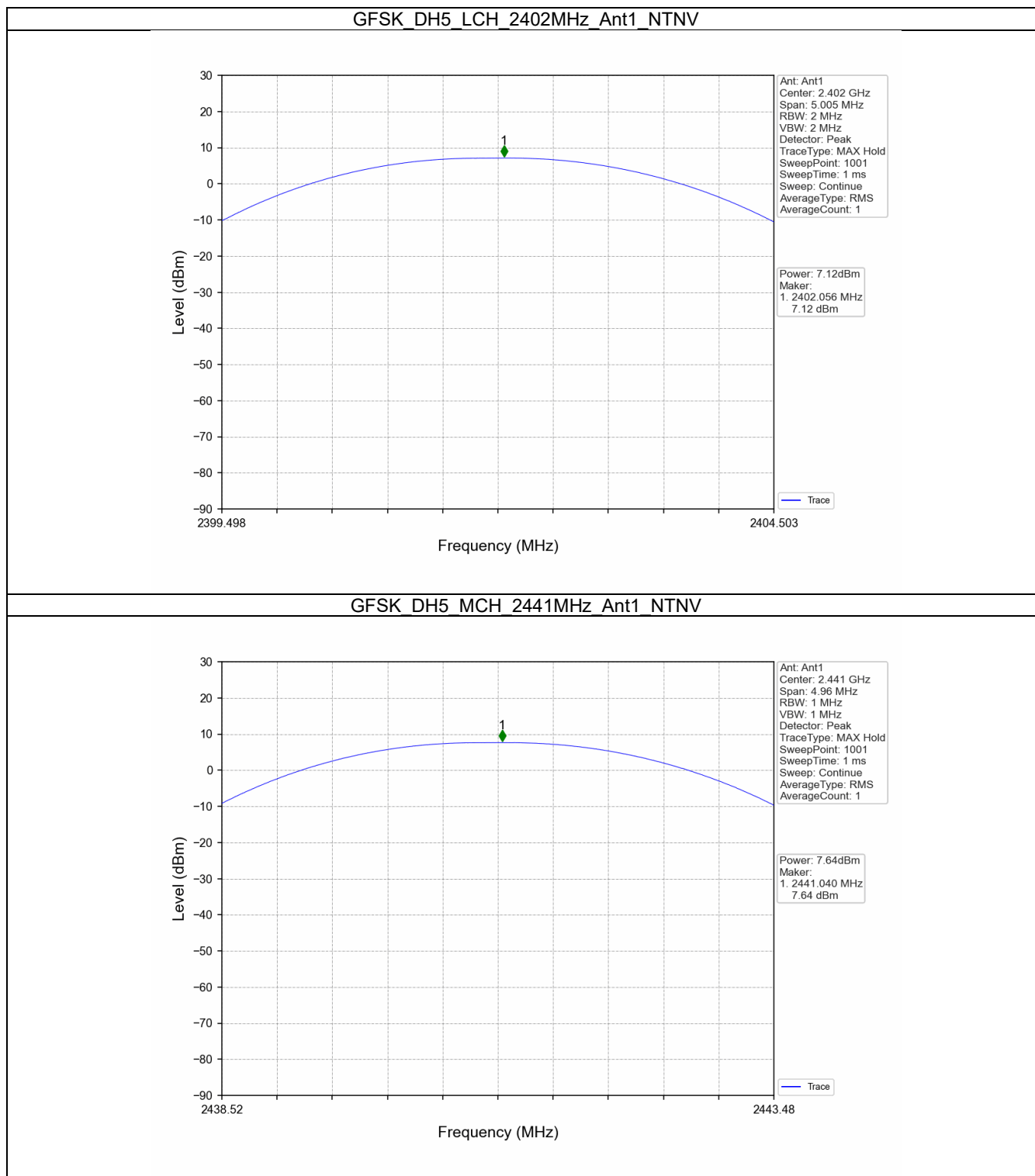
2.1 Power

2.1.1 Test Result

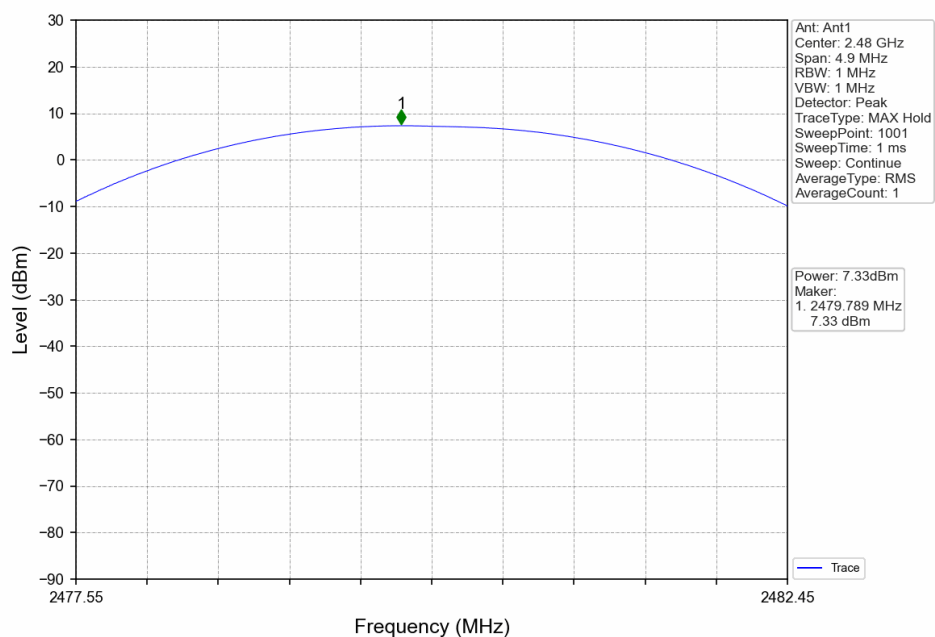
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				Ant1	Limit	
GFSK	SISO	2402	DH5	7.12	<=20.97	Pass
		2441	DH5	7.64	<=20.97	Pass
		2480	DH5	7.33	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	2.43	<=20.97	Pass
		2441	2DH5	2.88	<=20.97	Pass
		2480	2DH5	3.24	<=20.97	Pass
8DPSK	SISO	2402	3DH5	2.68	<=20.97	Pass
		2441	3DH5	3.00	<=20.97	Pass
		2480	3DH5	3.67	<=20.97	Pass

Note1: Antenna Gain: Ant1: -6.14dBi;

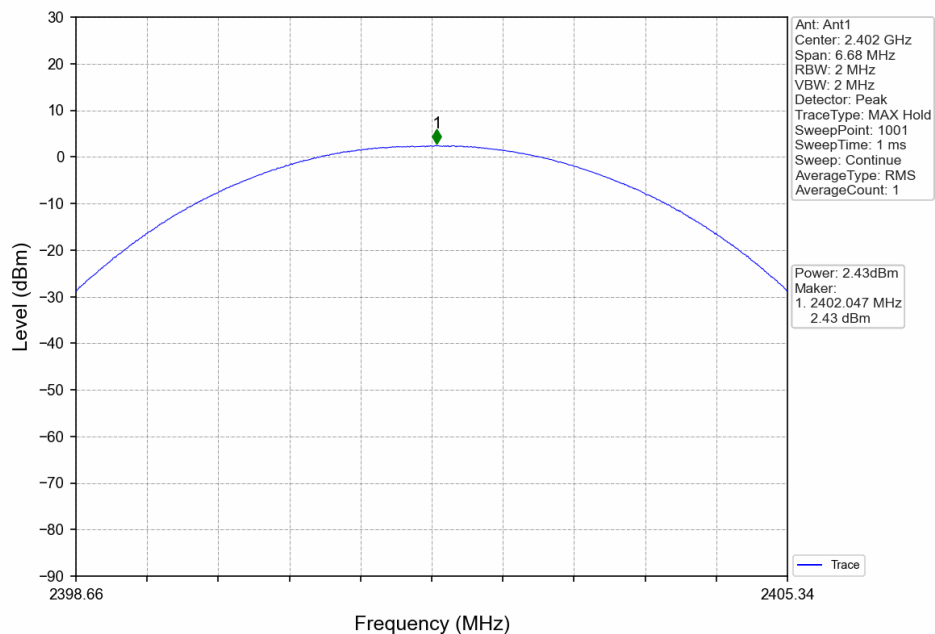
2.1.2 Test Graph



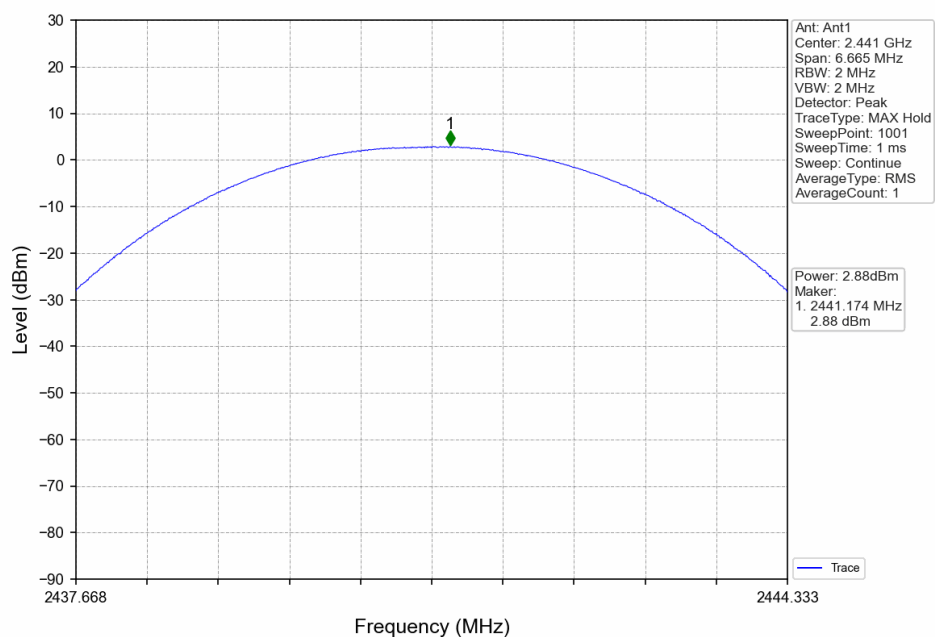
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



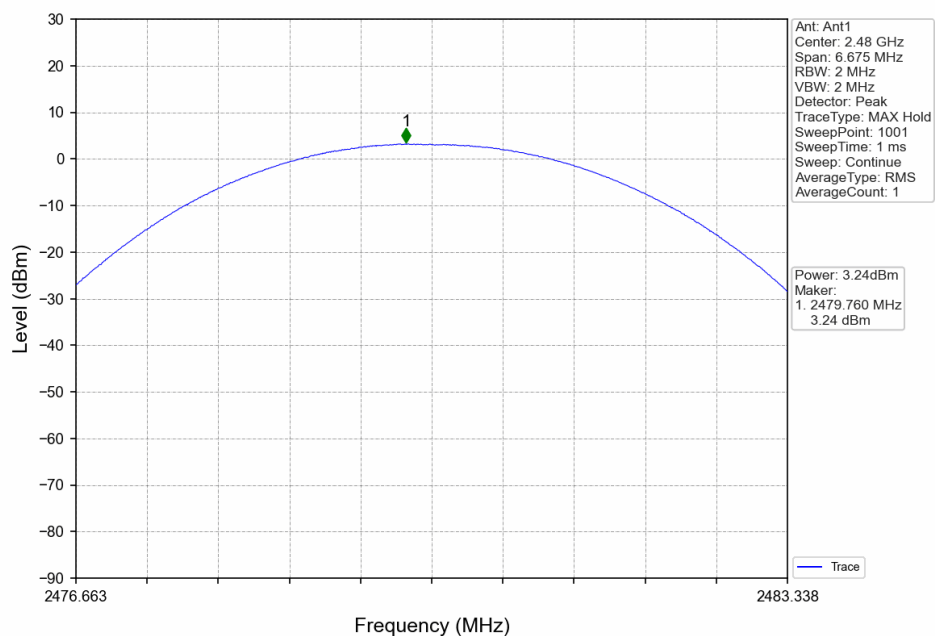
PI/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



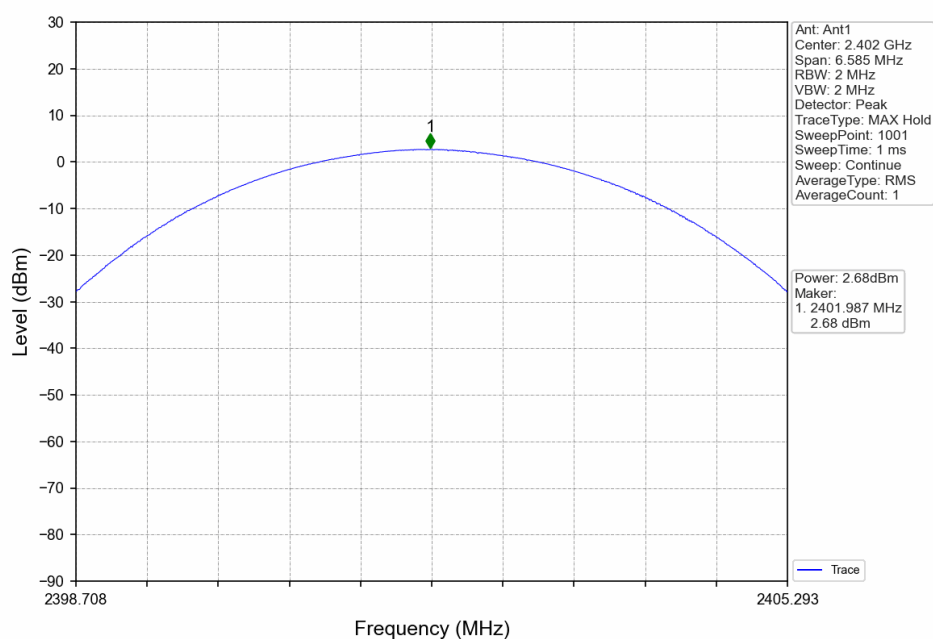
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



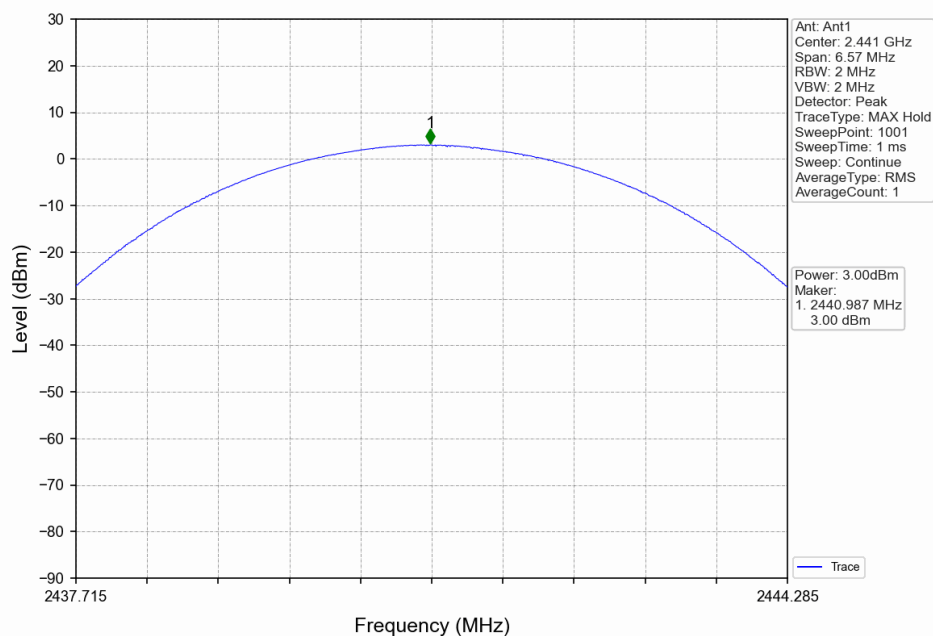
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

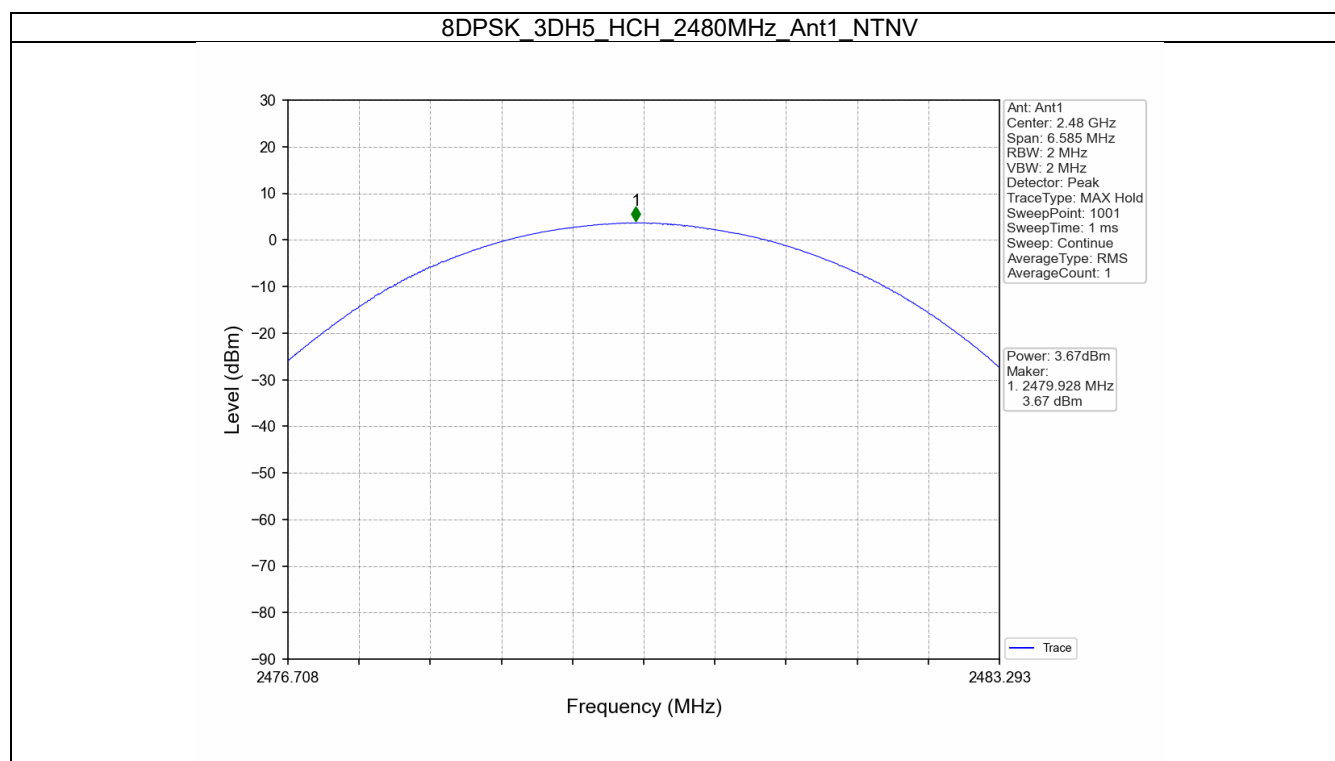


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV





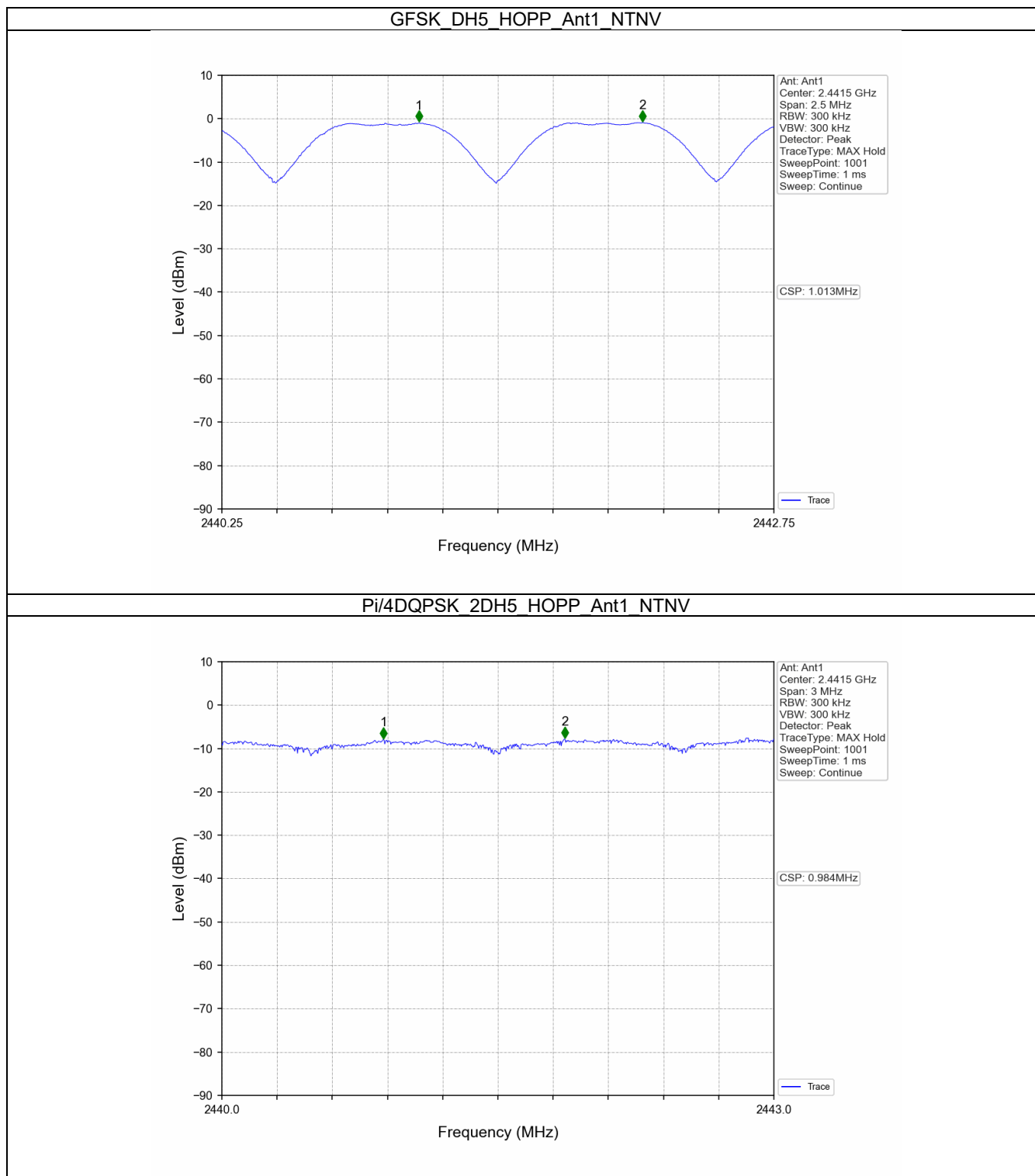
3. Carrier Frequency Separation

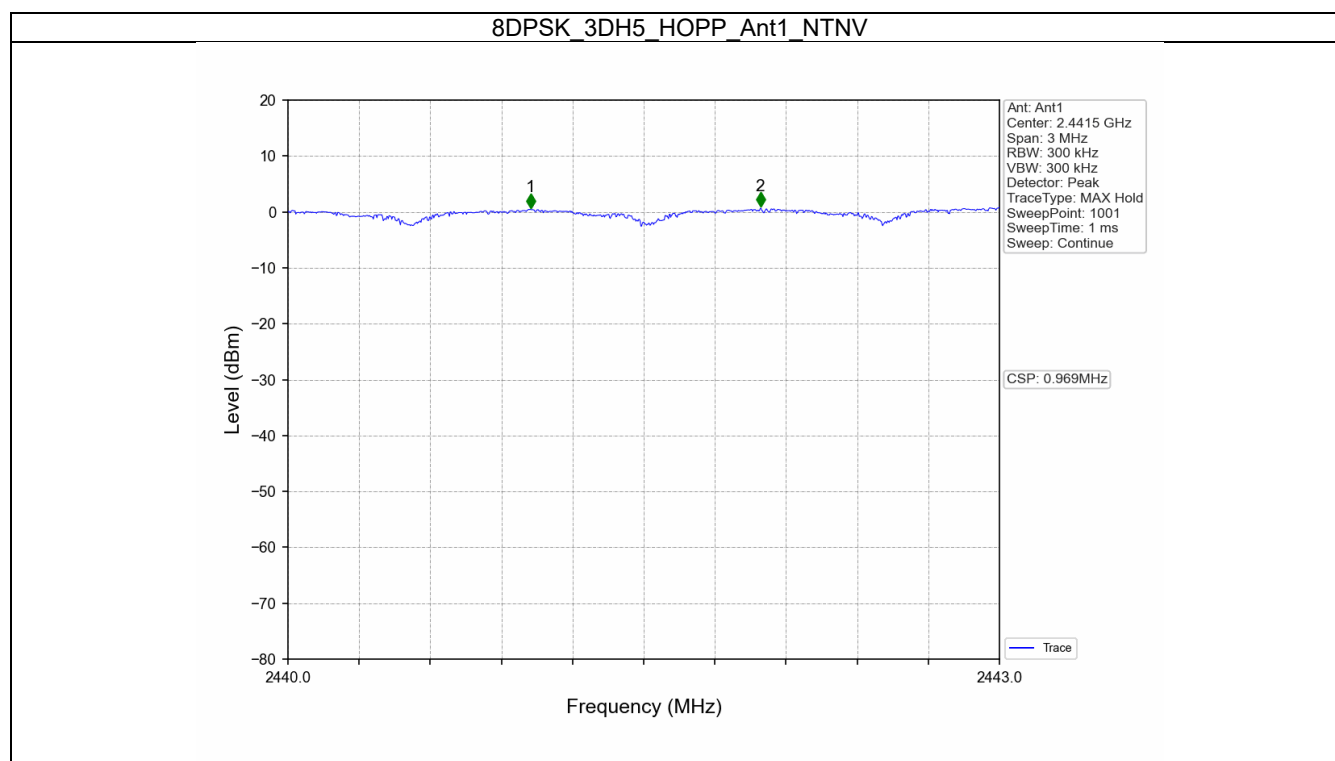
3.1 Ant1

3.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.013	0.980	≥ 0.98	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	0.984	1.335	≥ 0.89	Pass
8DPSK	SISO	HOPP	3DH5	0.969	1.314	≥ 0.876	Pass

3.1.2 Test Graph





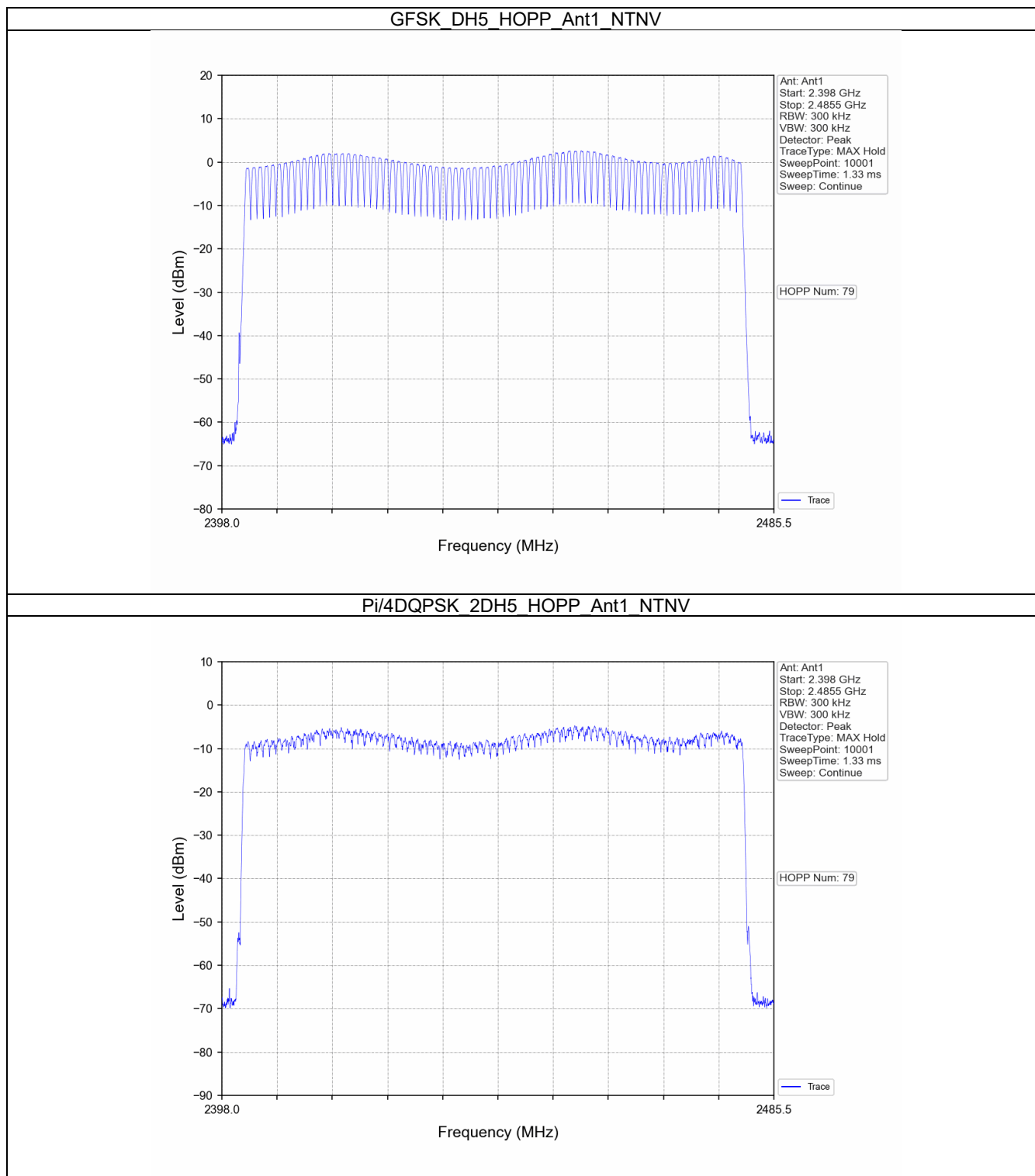
4. Number of Hopping Frequencies

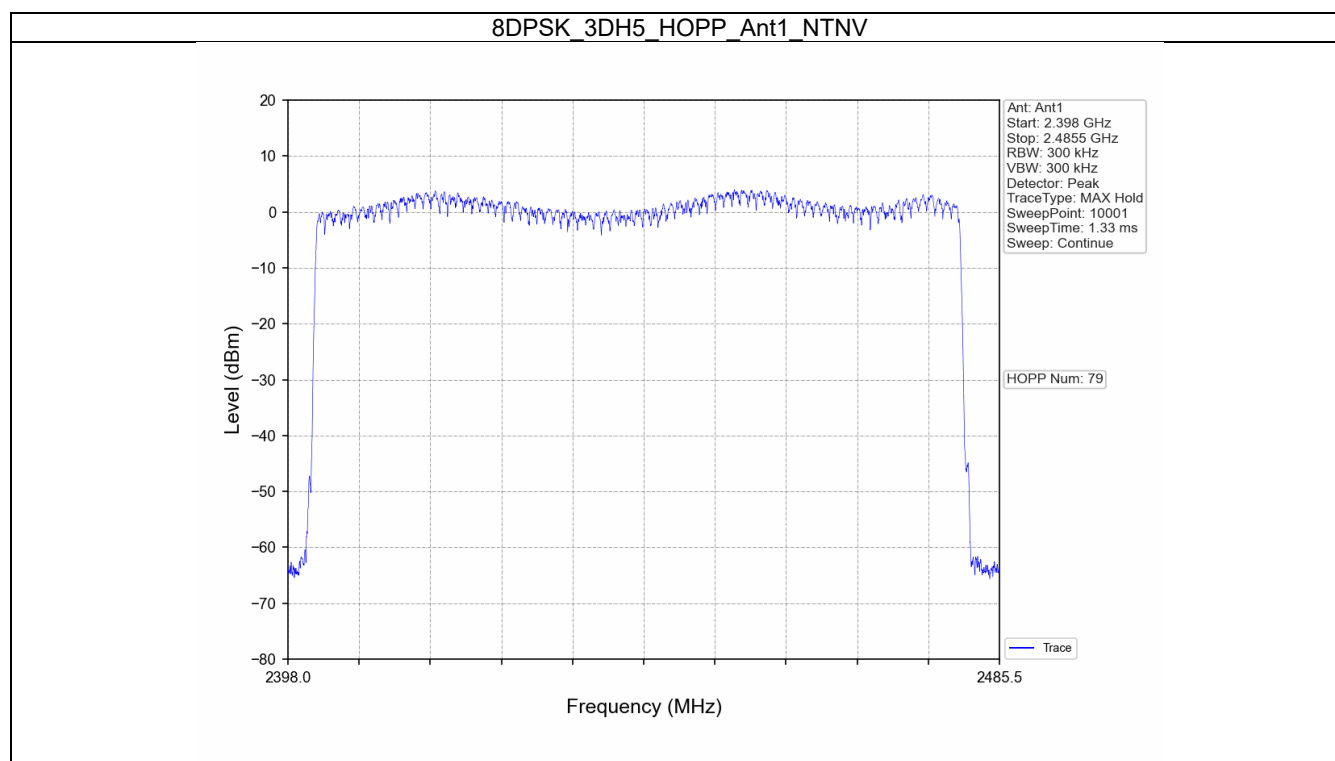
4.1 HoppNum

4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				Ant1	Limit	
GFSK	SISO	HOPP	DH5	79	≥ 15	Pass
PI/4DQPSK	SISO	HOPP	2DH5	79	≥ 15	Pass
8DPSK	SISO	HOPP	3DH5	79	≥ 15	Pass

4.1.2 Test Graph





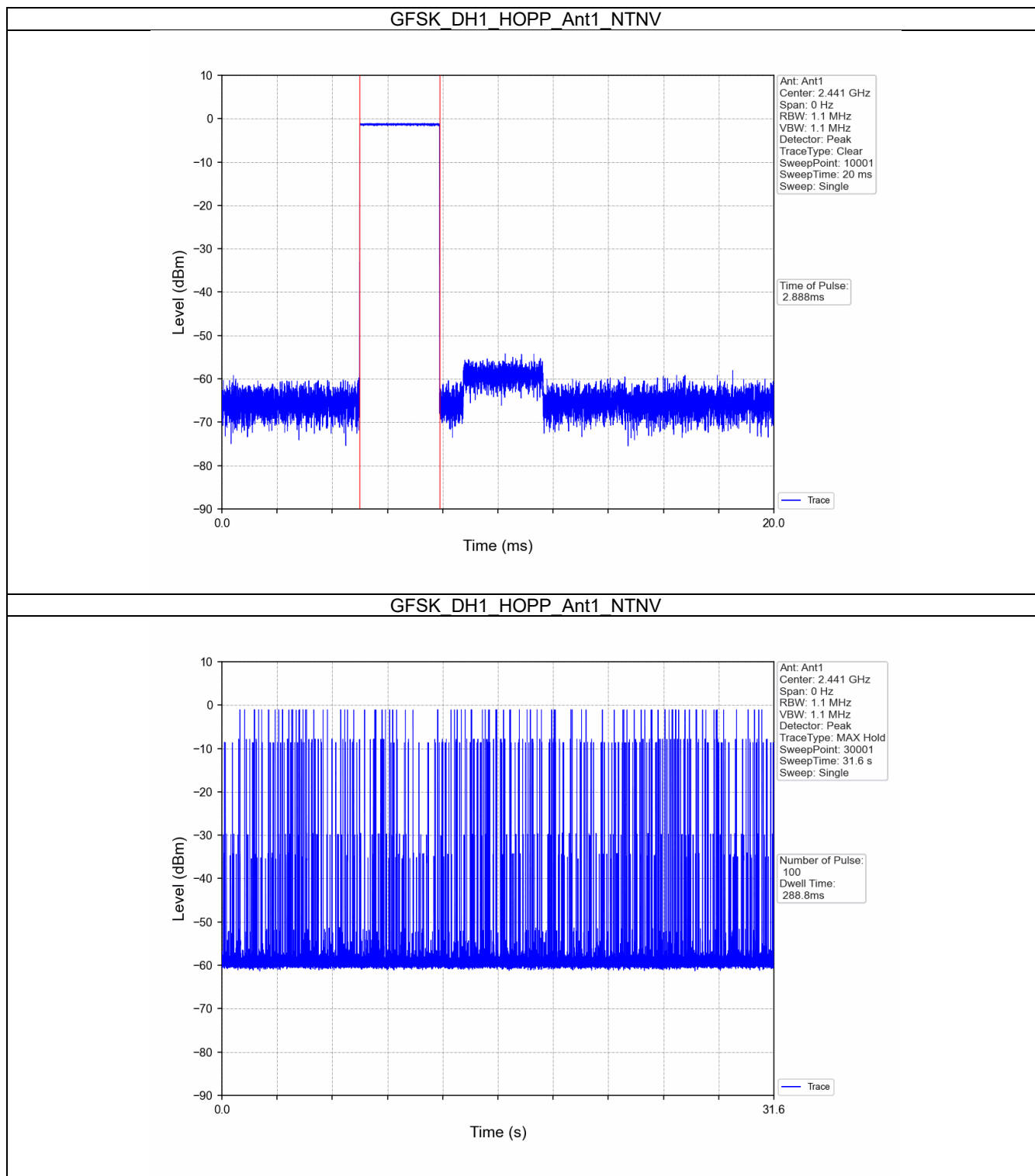
5. Time of Occupancy (Dwell Time)

5.1 Ant1

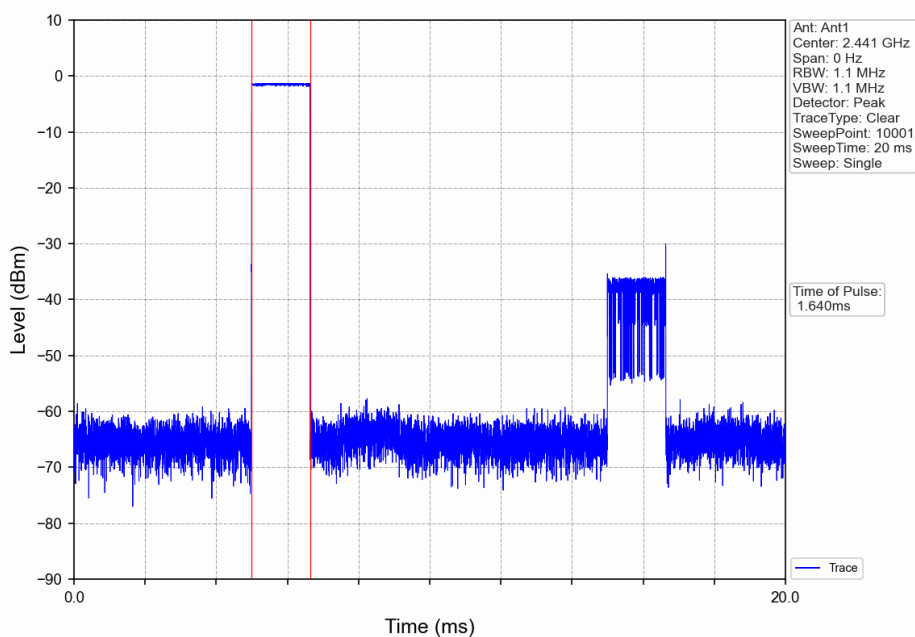
5.1.1 Test Result

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	2.888	31.600	100	288.800	<=400	Pass
			DH3	1.640	31.600	166	272.240	<=400	Pass
			DH5	2.888	31.600	110	317.680	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.390	31.600	319	124.410	<=400	Pass
			2DH3	1.644	31.600	162	266.328	<=400	Pass
			2DH5	2.890	31.600	106	306.340	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.390	31.600	319	124.410	<=400	Pass
			3DH3	1.642	31.600	167	274.214	<=400	Pass
			3DH5	2.892	31.600	92	266.064	<=400	Pass

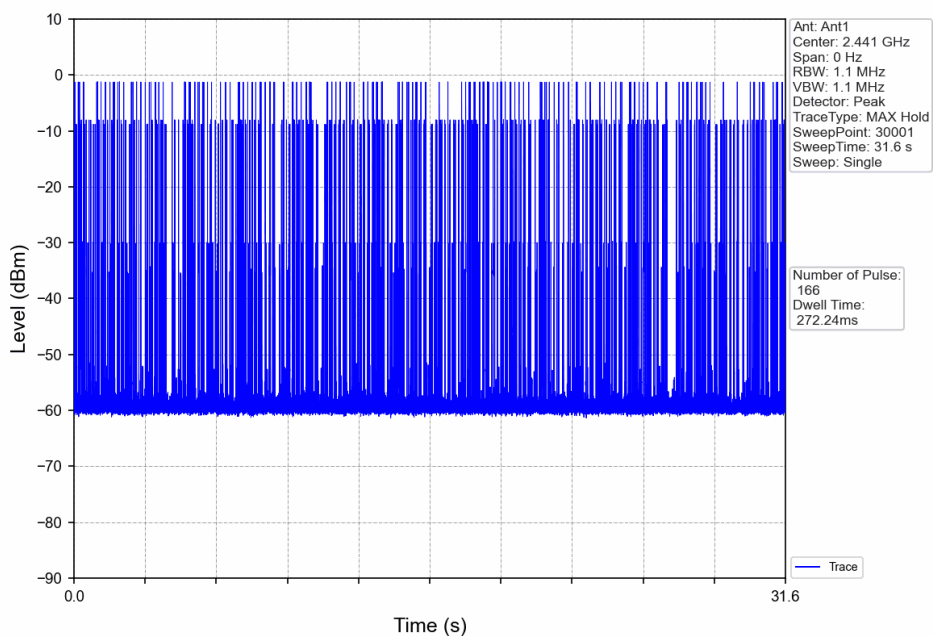
5.1.2 Test Graph

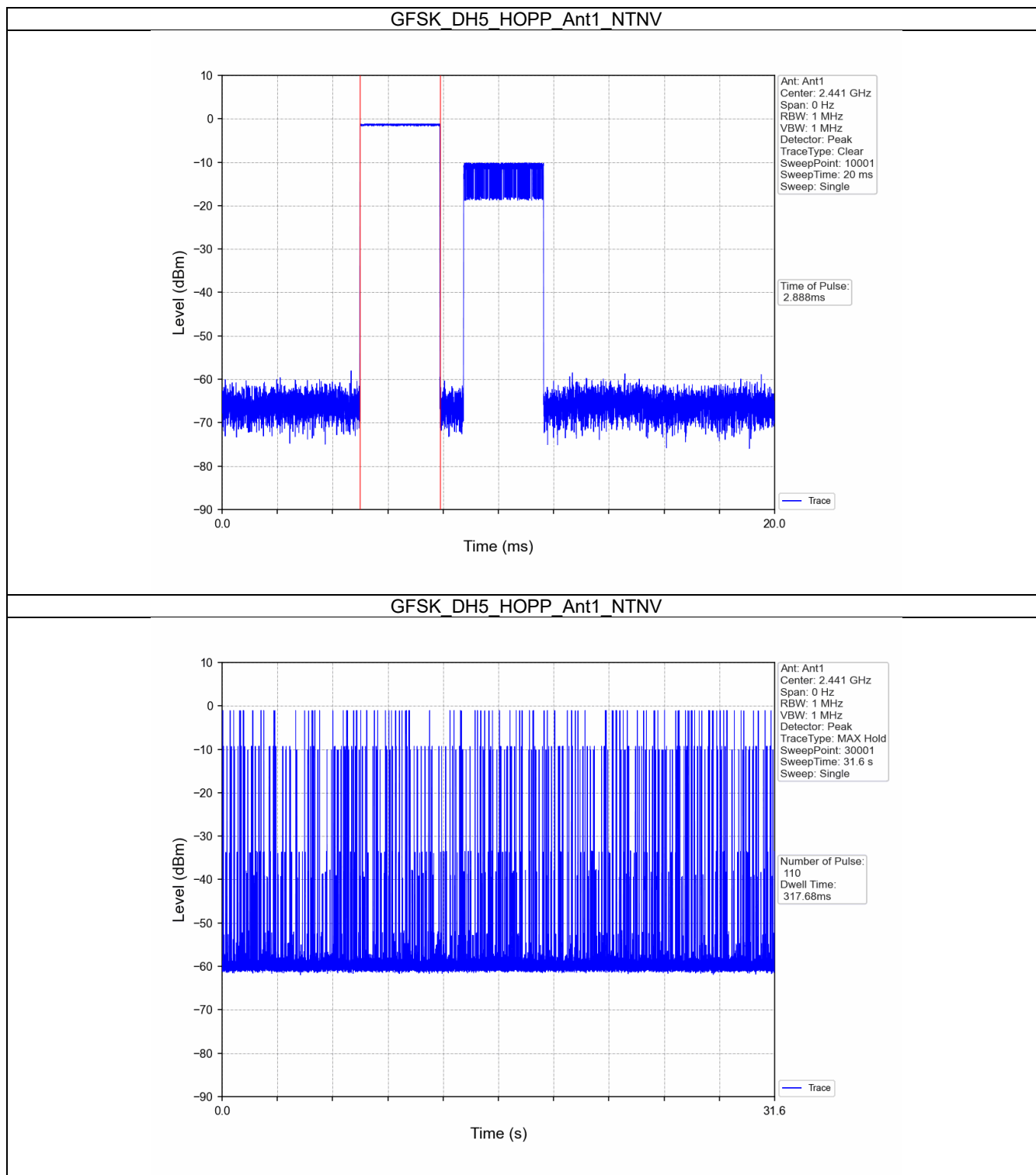


GFSK_DH3_HOPP_Ant1_NTNV

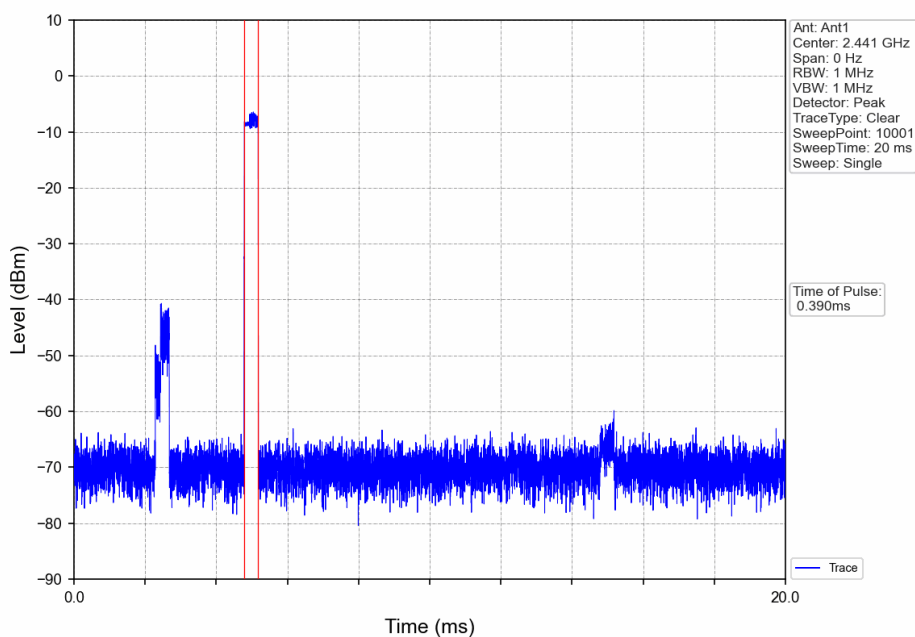


GFSK_DH3_HOPP_Ant1_NTNV

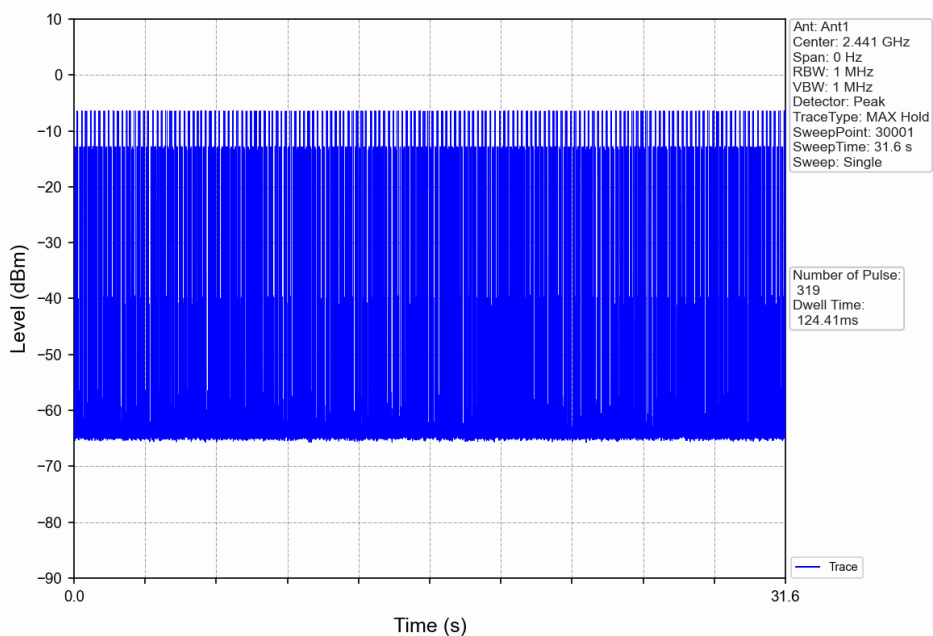




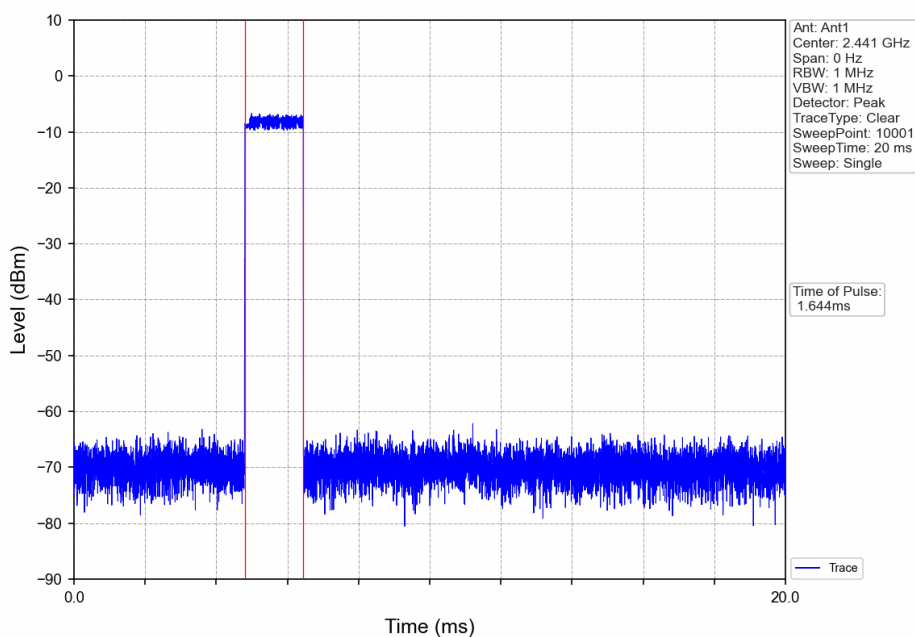
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



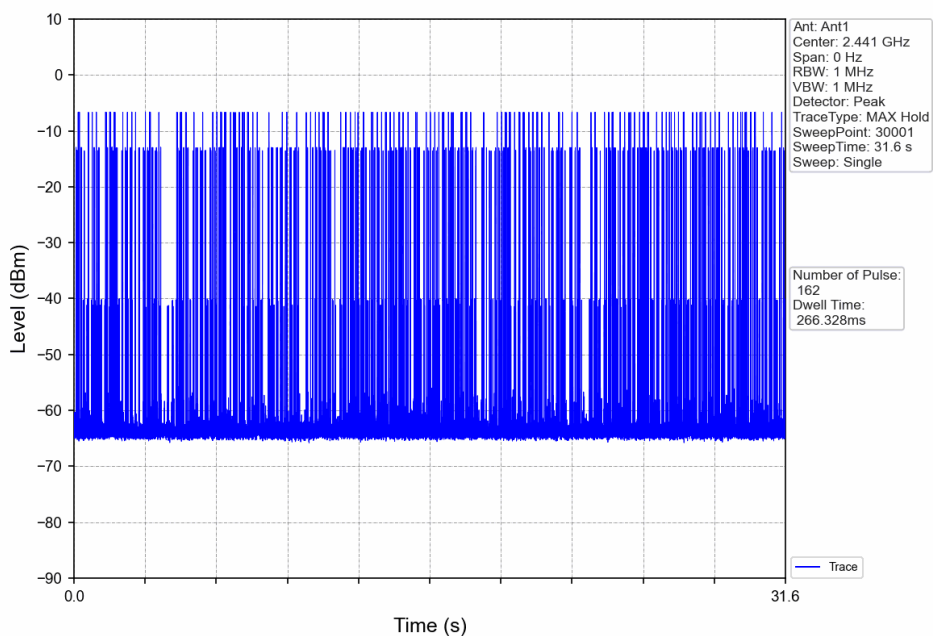
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



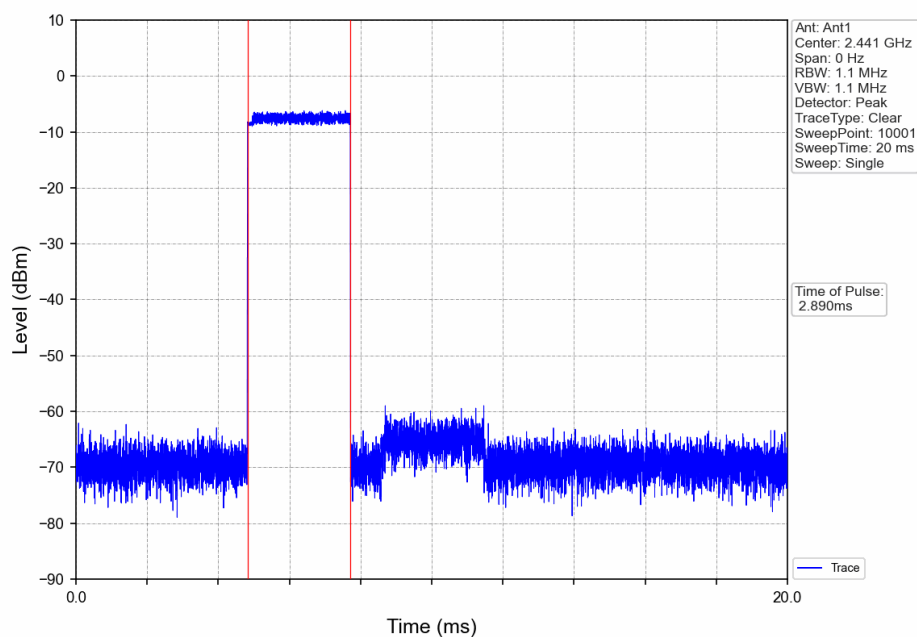
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



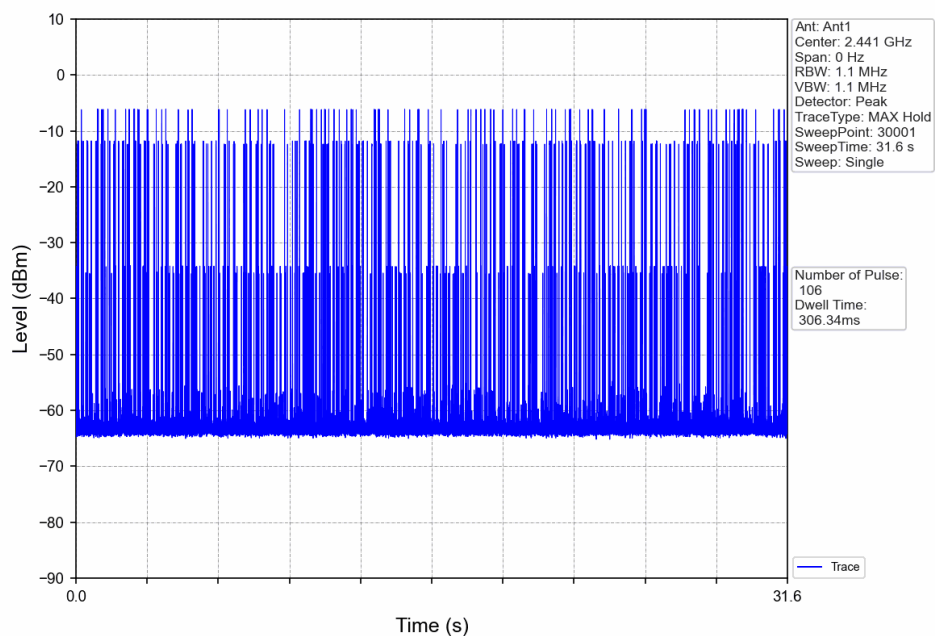
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV

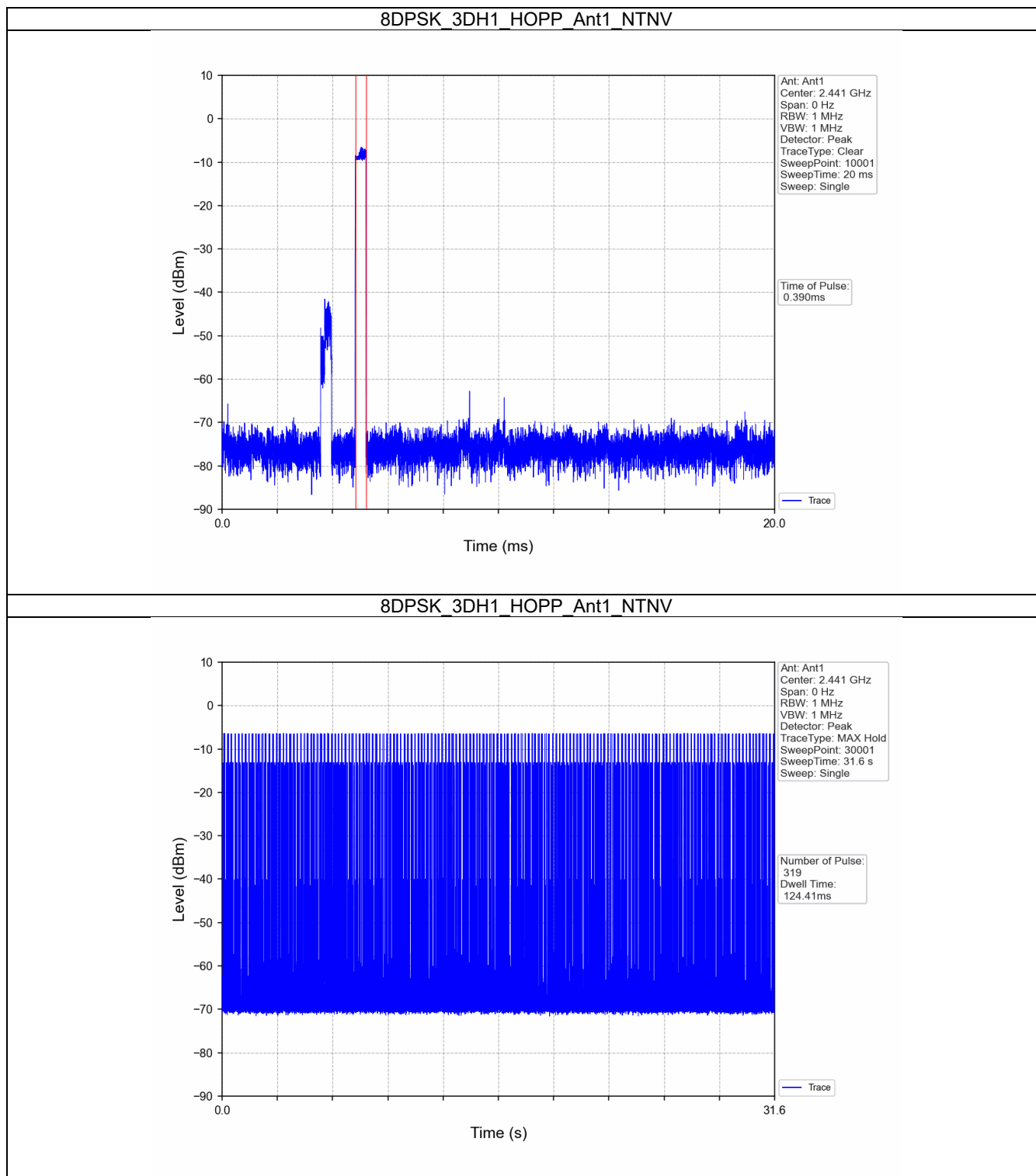


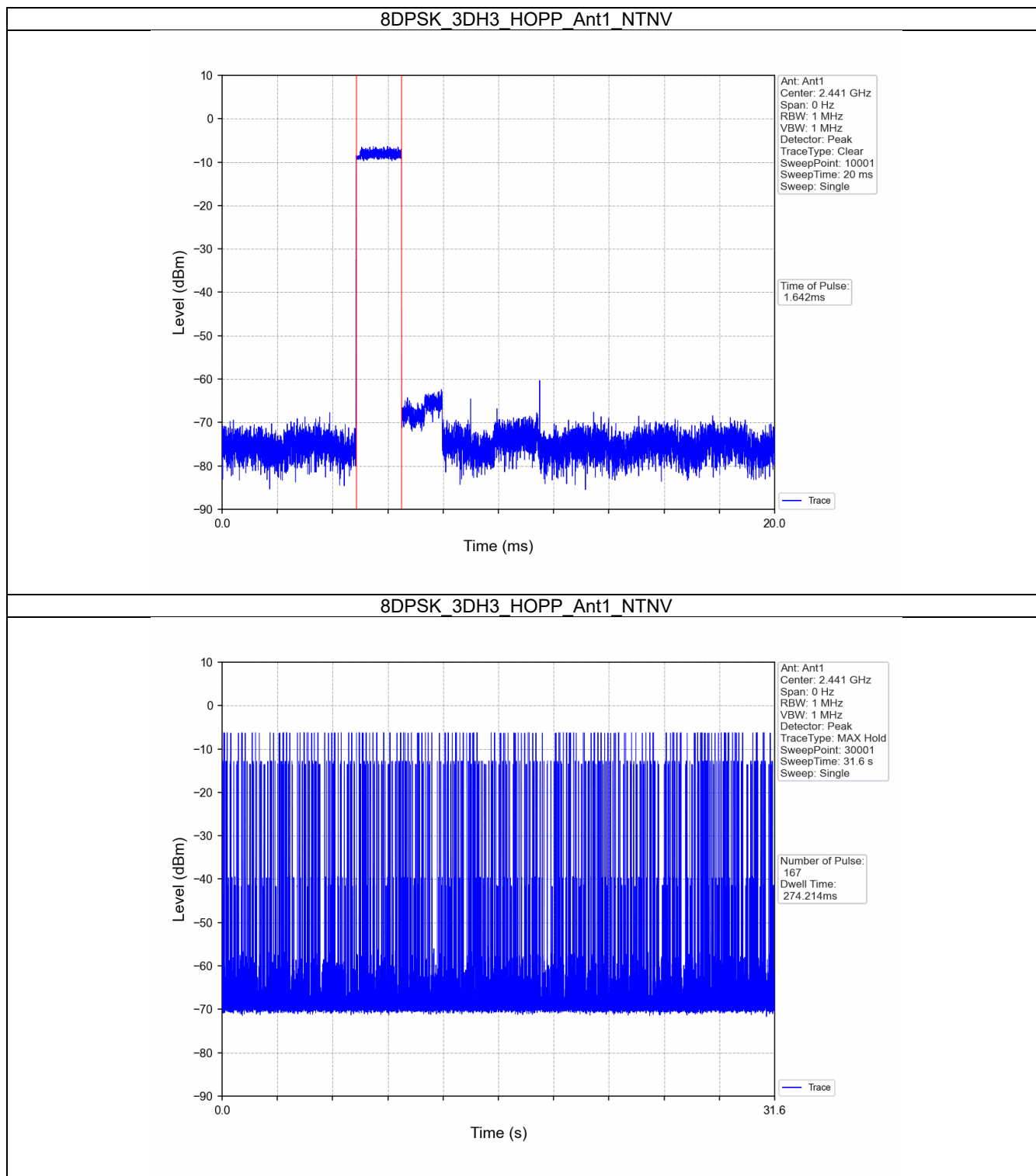
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV

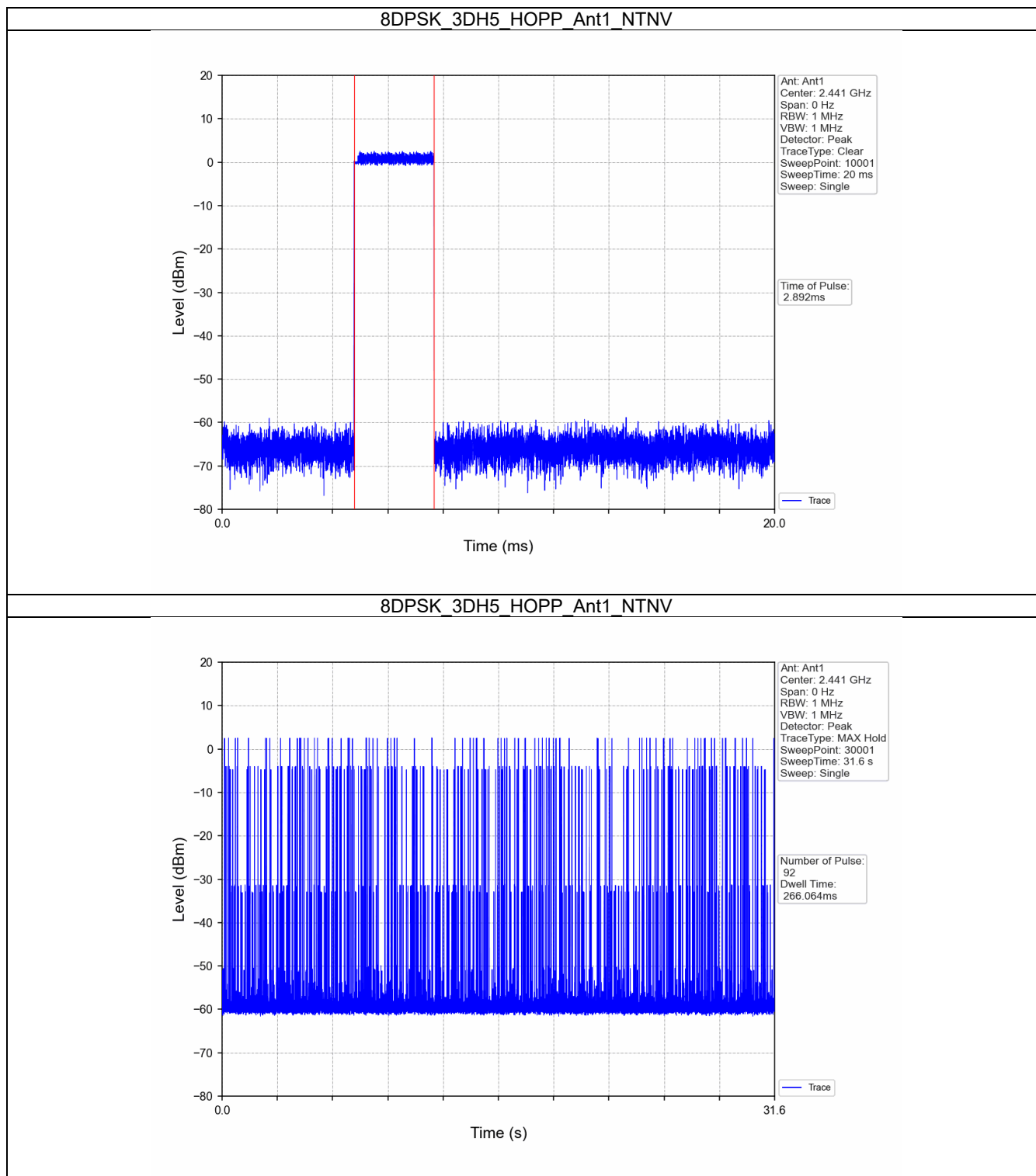


Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV









6. Unwanted Emissions In Non-restricted Frequency Bands

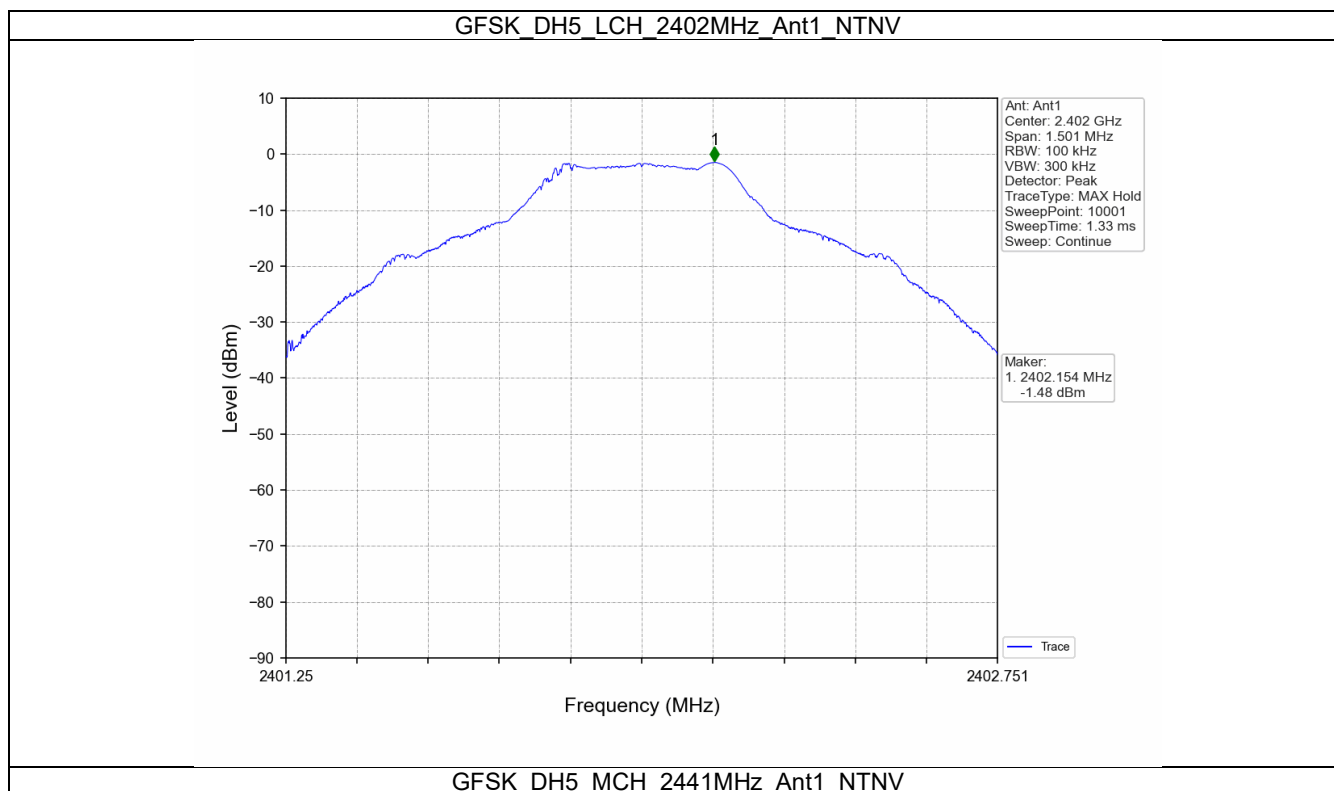
6.1 Ref

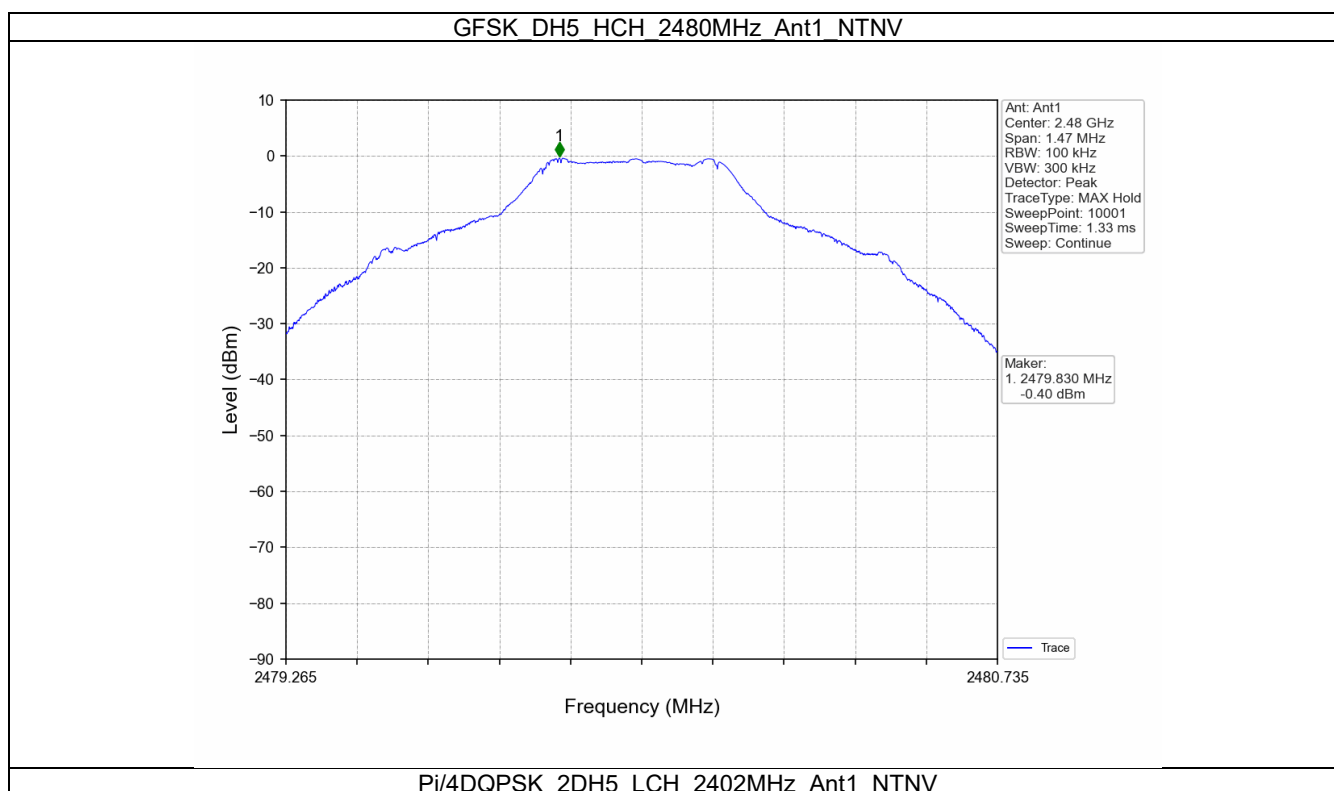
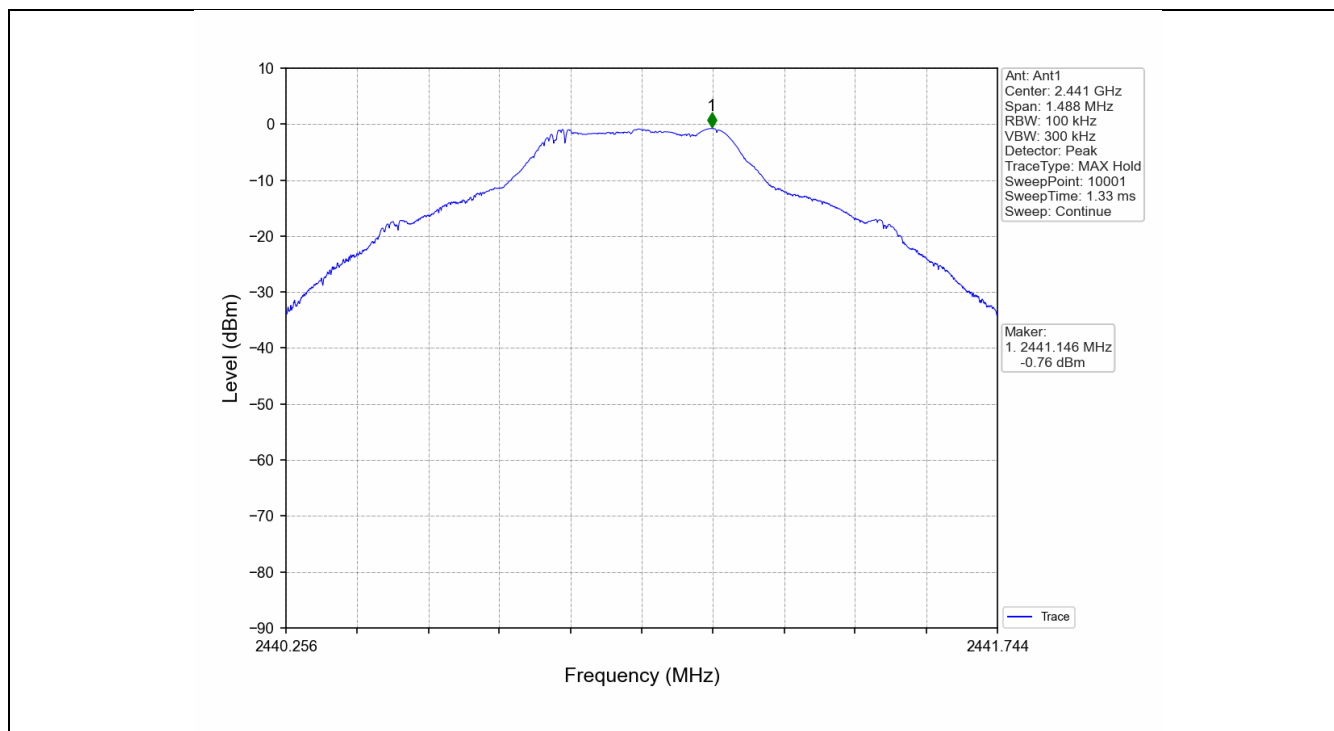
6.1.1 Test Result

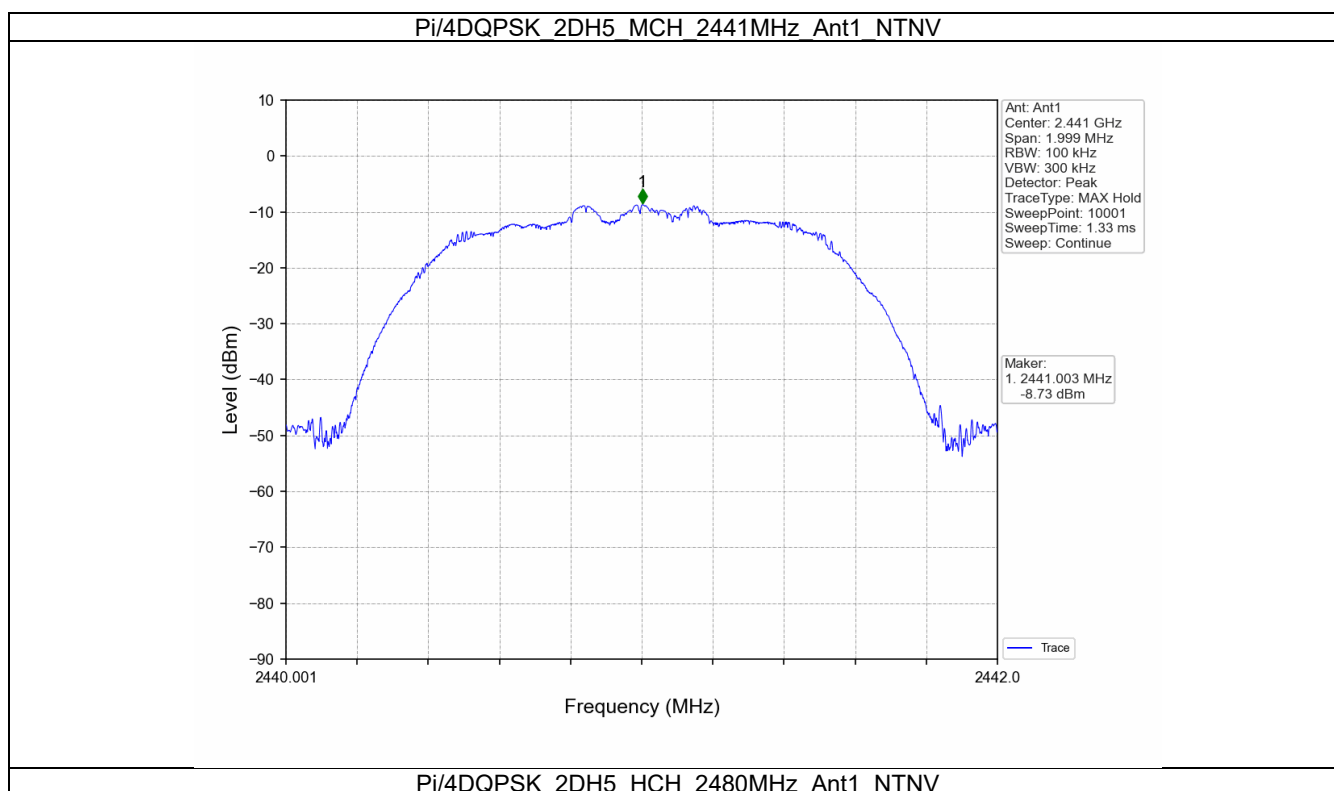
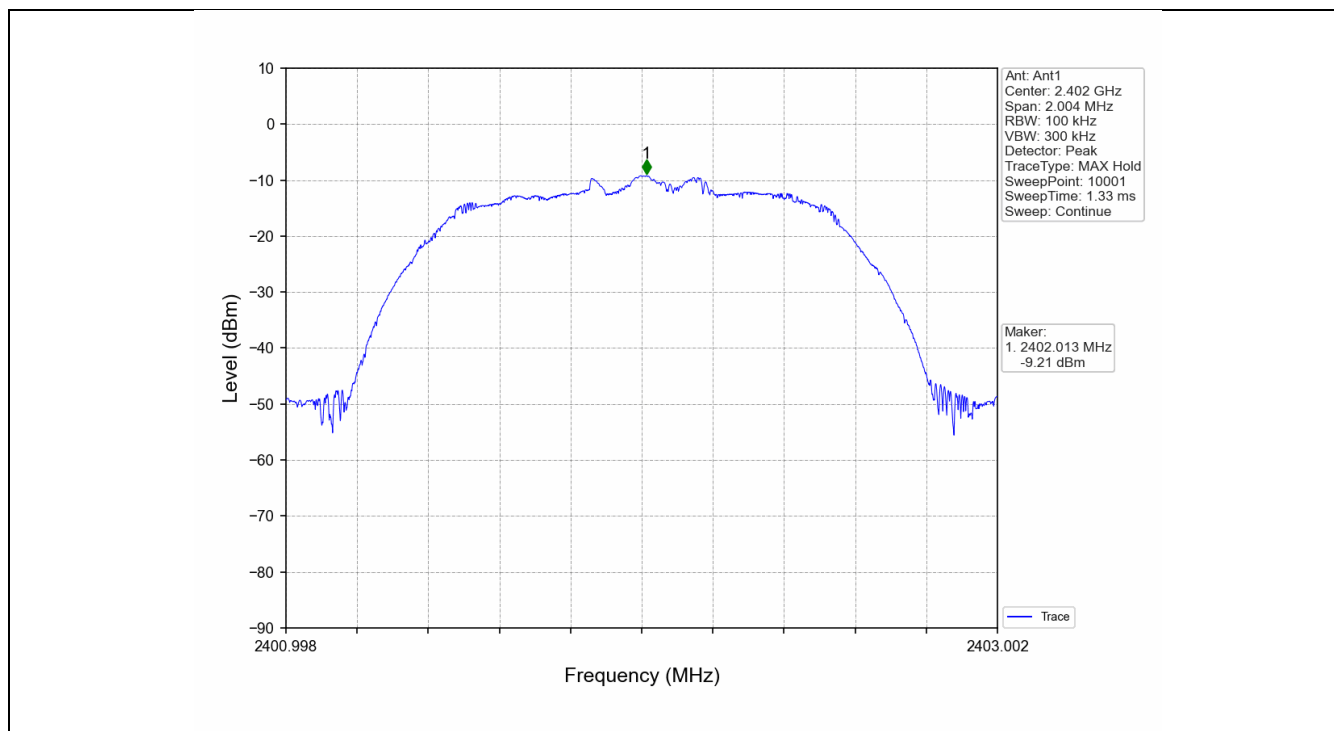
Mode	TX Type	Frequency (MHz)	Packet Type	Ant	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-1.48
		2441	DH5	1	-0.76
		2480	DH5	1	-0.40
Pi/4DQPSK	SISO	2402	2DH5	1	-9.21
		2441	2DH5	1	-8.73
		2480	2DH5	1	-7.91
8DPSK	SISO	2402	3DH5	1	-0.34
		2441	3DH5	1	-0.18
		2480	3DH5	1	0.71

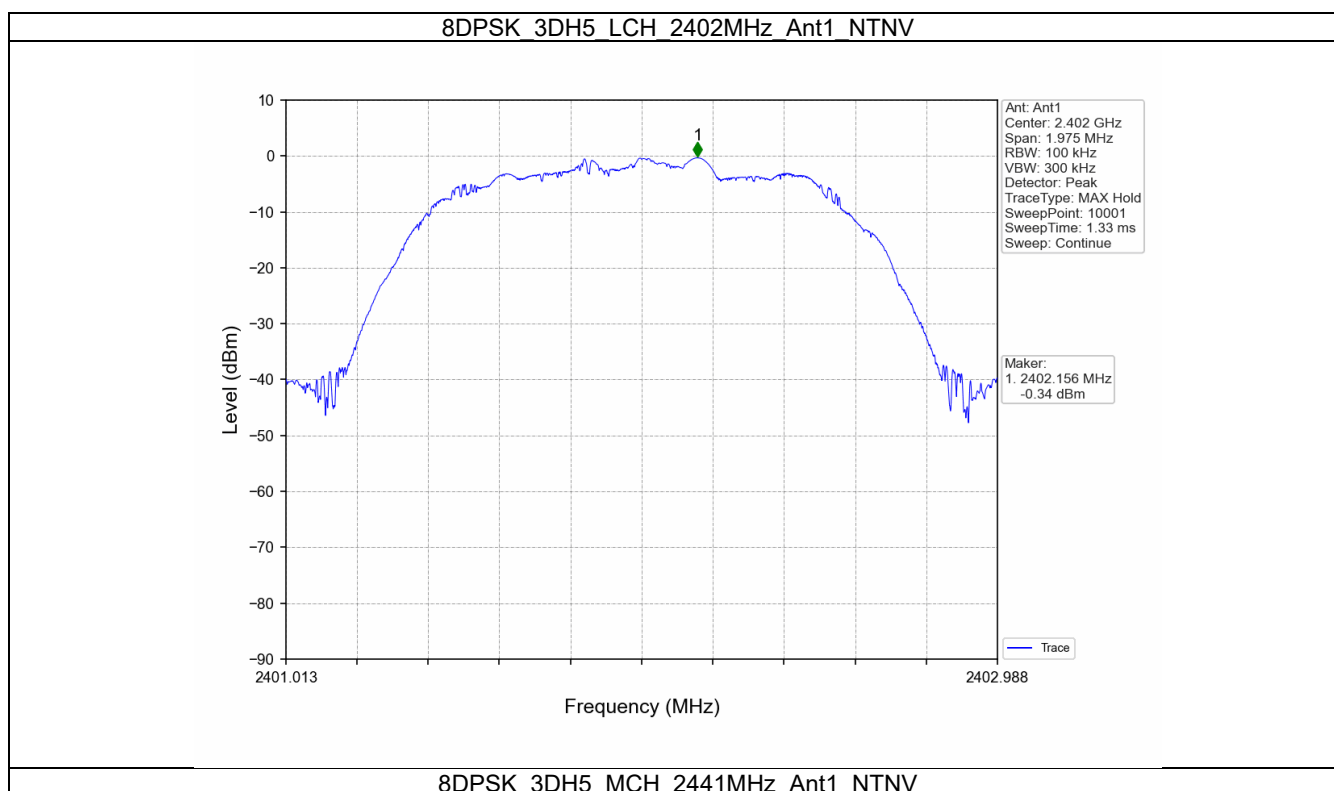
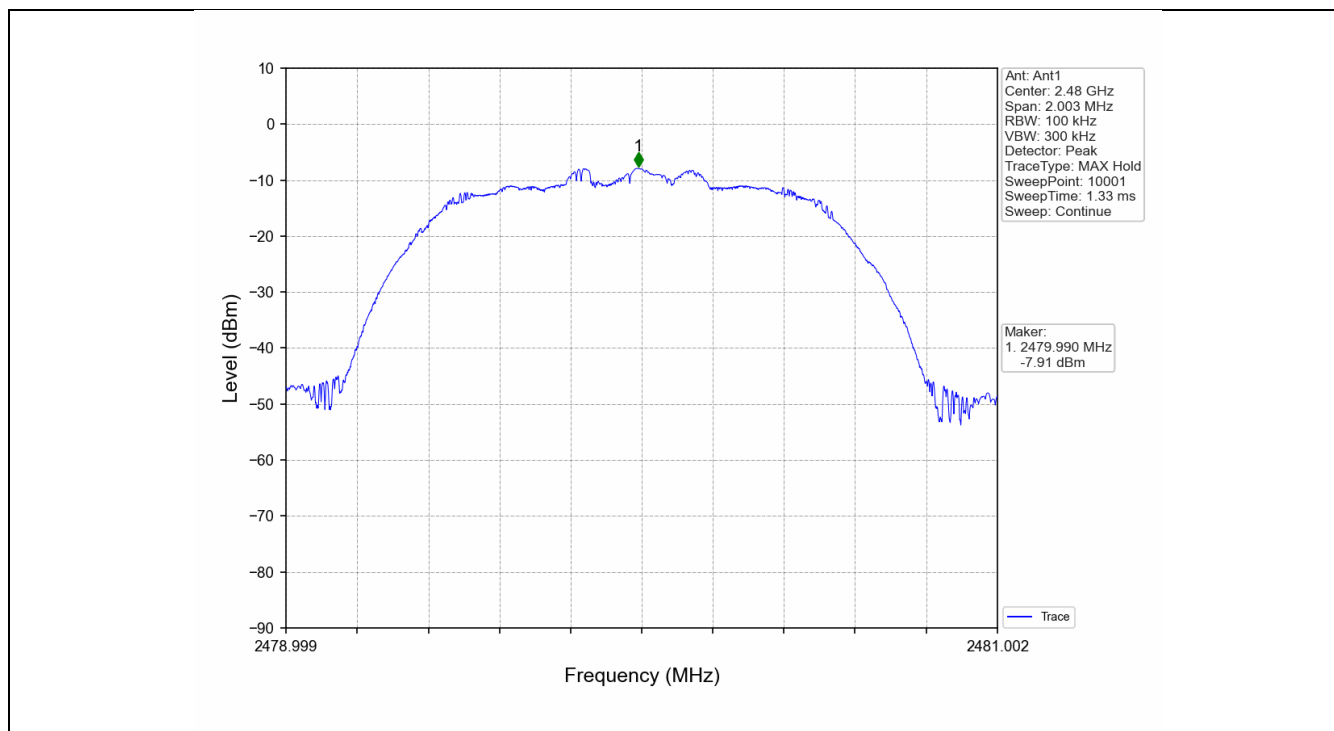
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

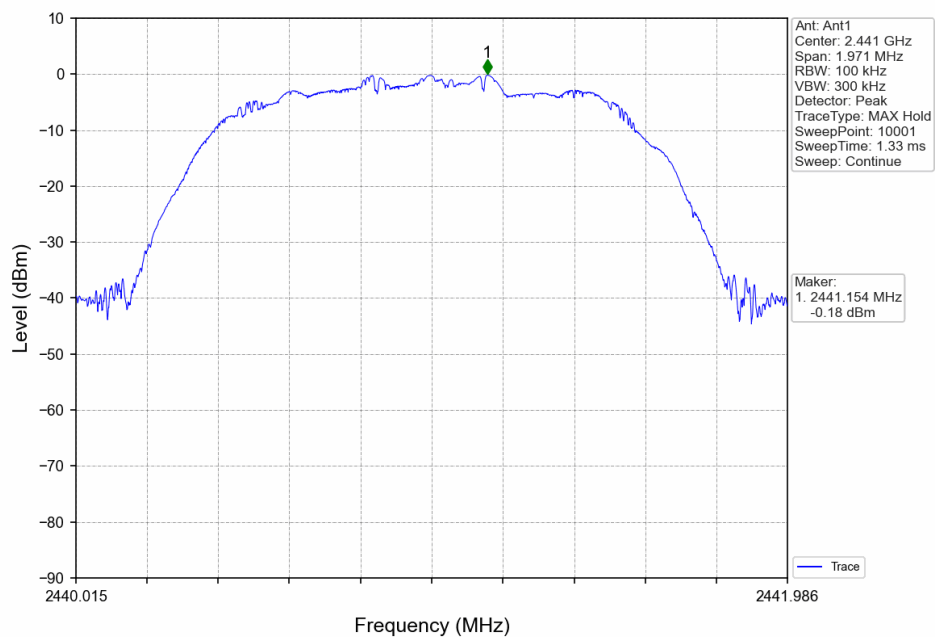
6.1.2 Test Graph



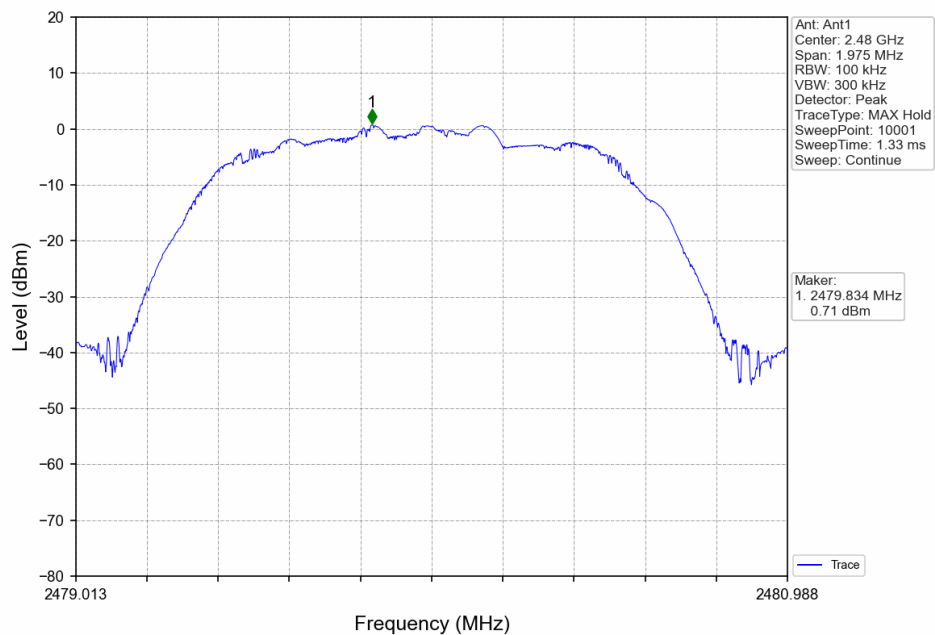








8DPSK 3DH5 HCH 2480MHz Ant1 NTN



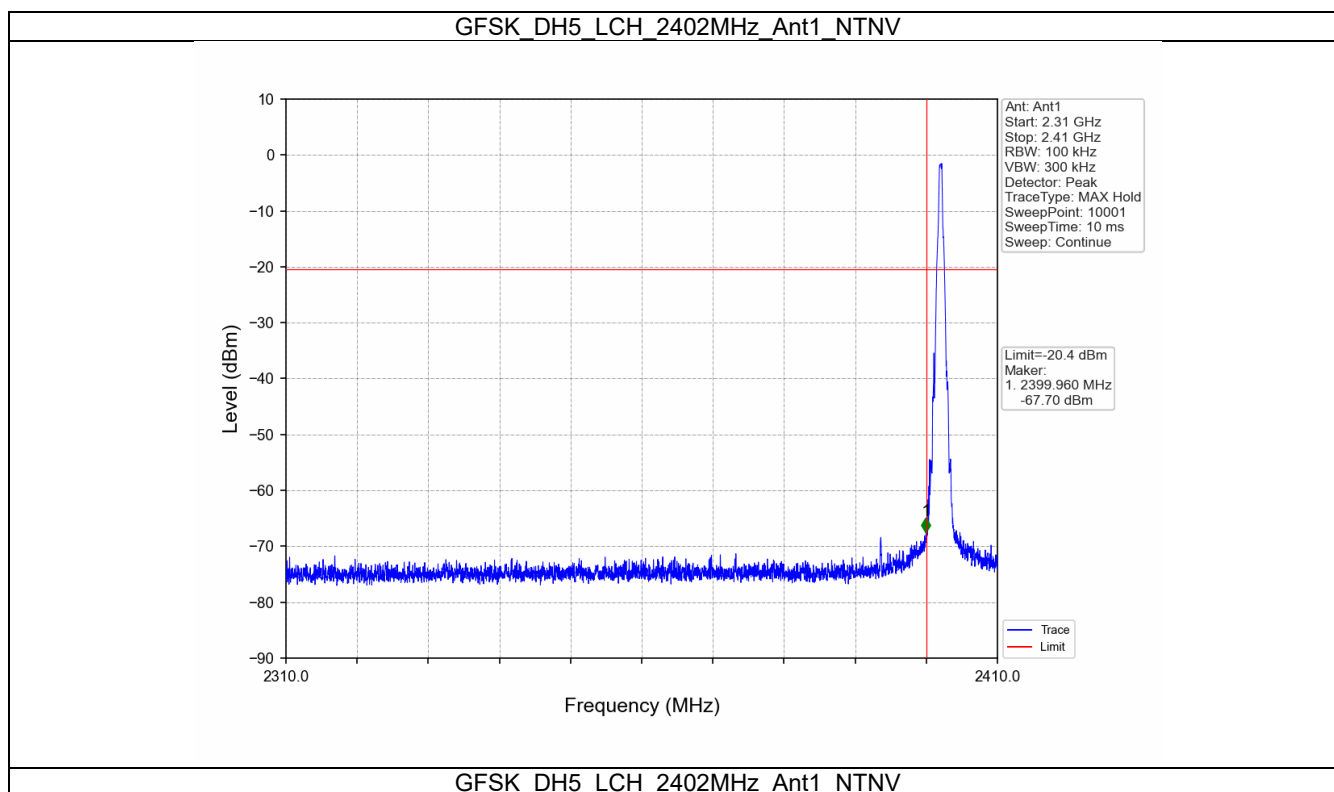
6.2 CSE

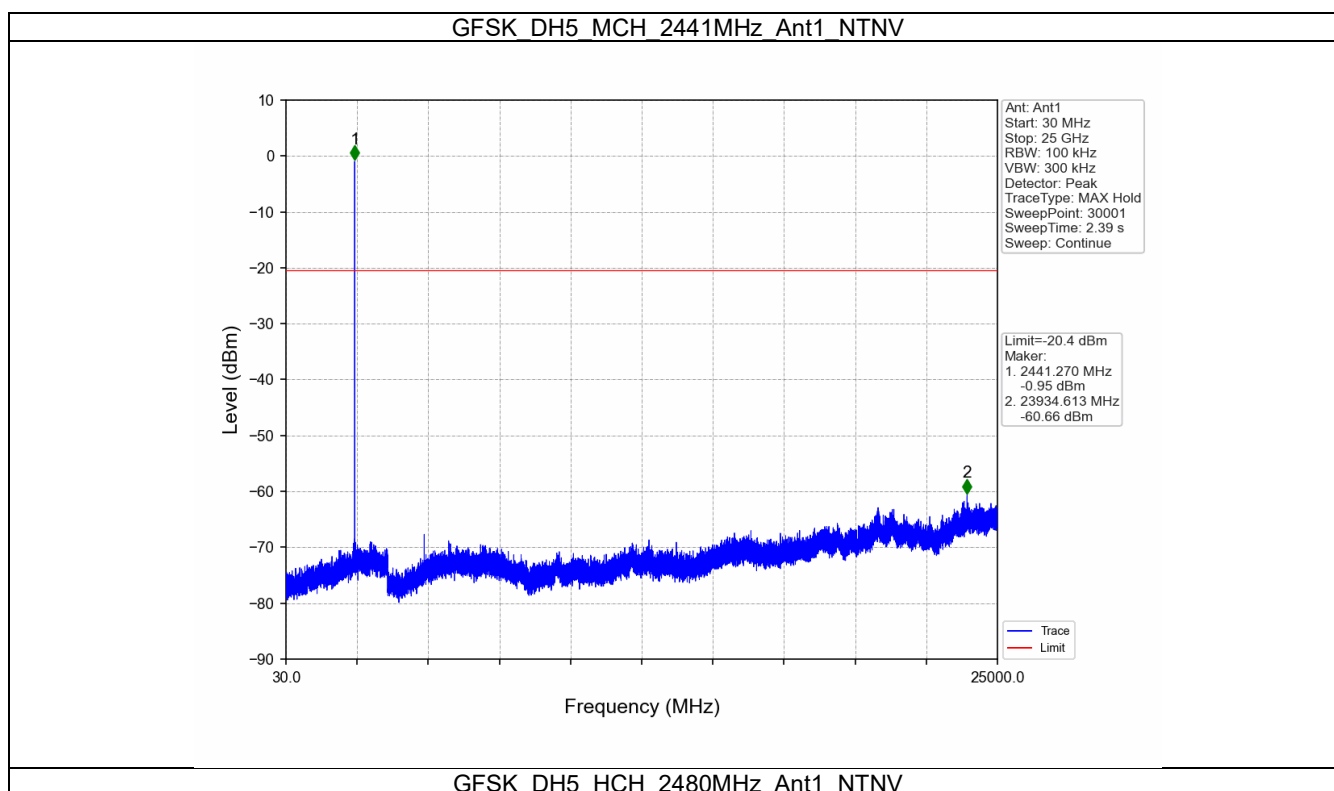
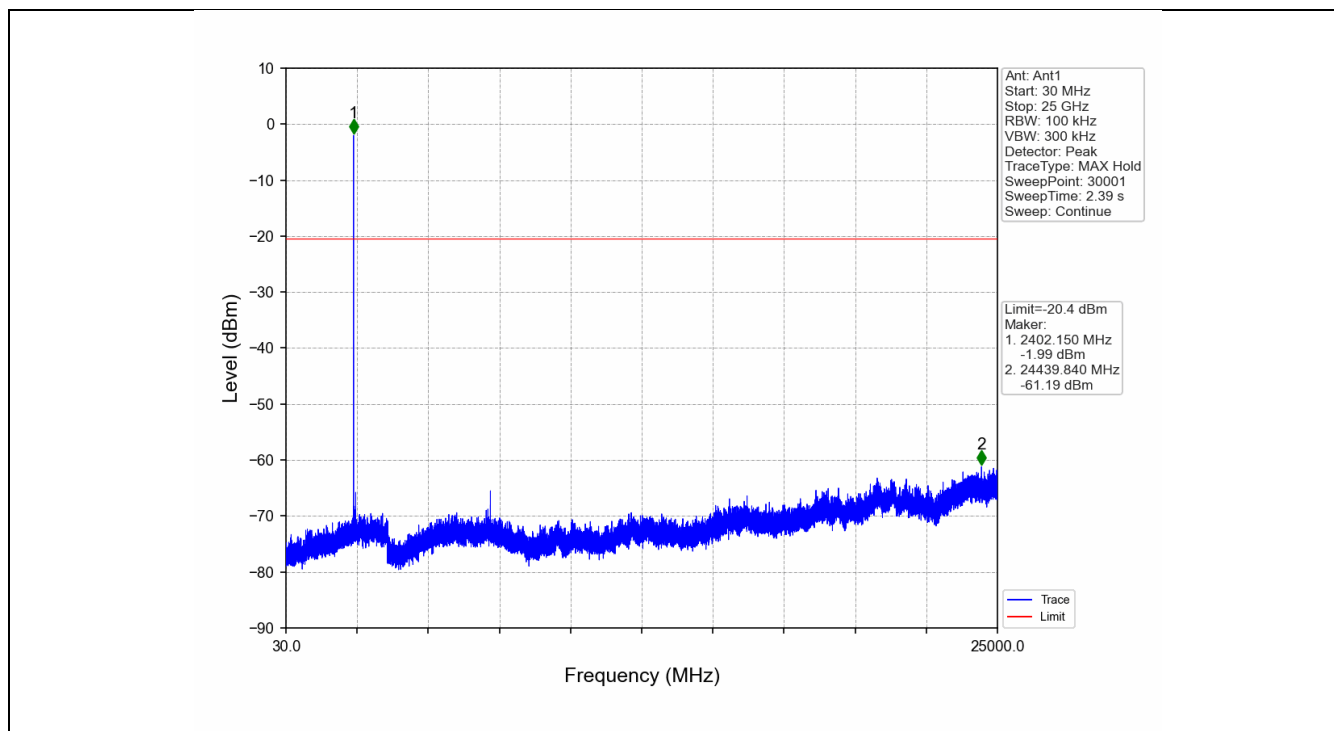
6.2.1 Test Result

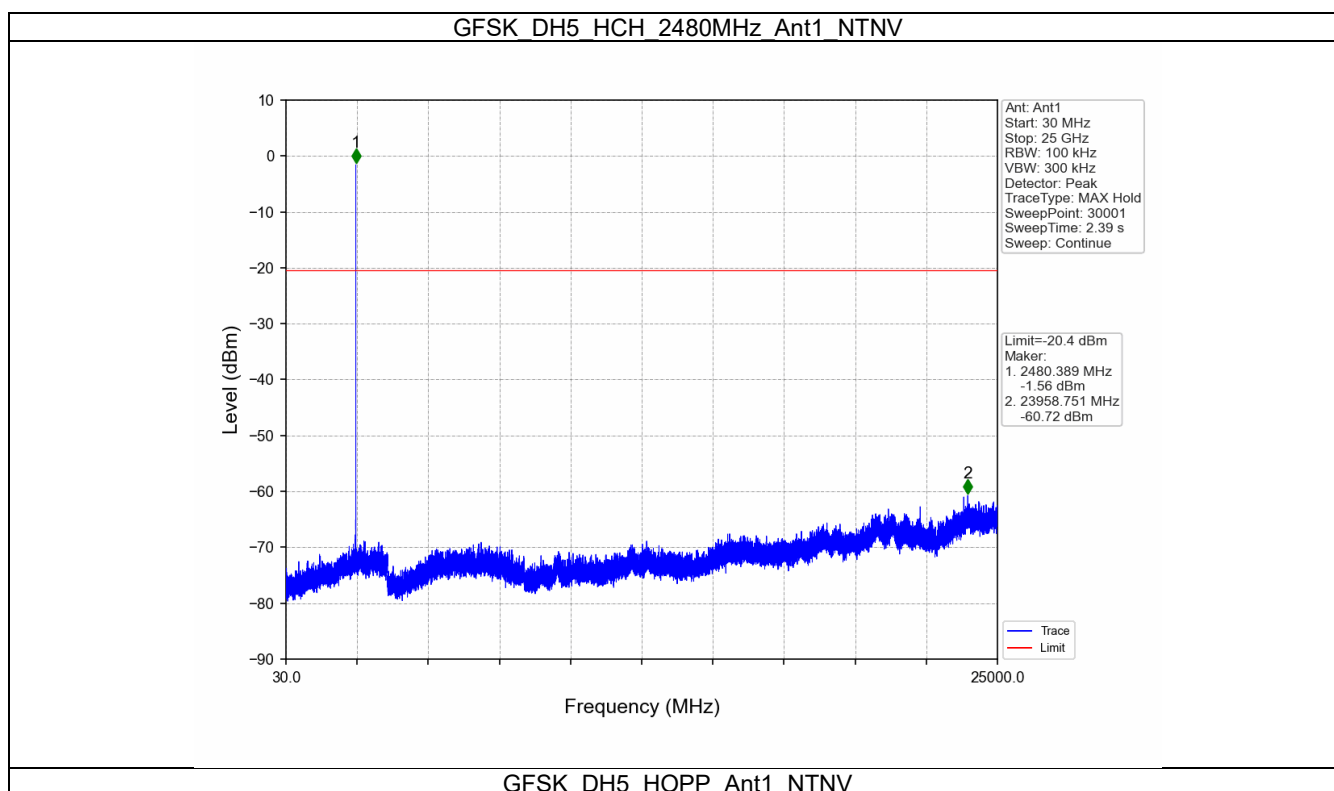
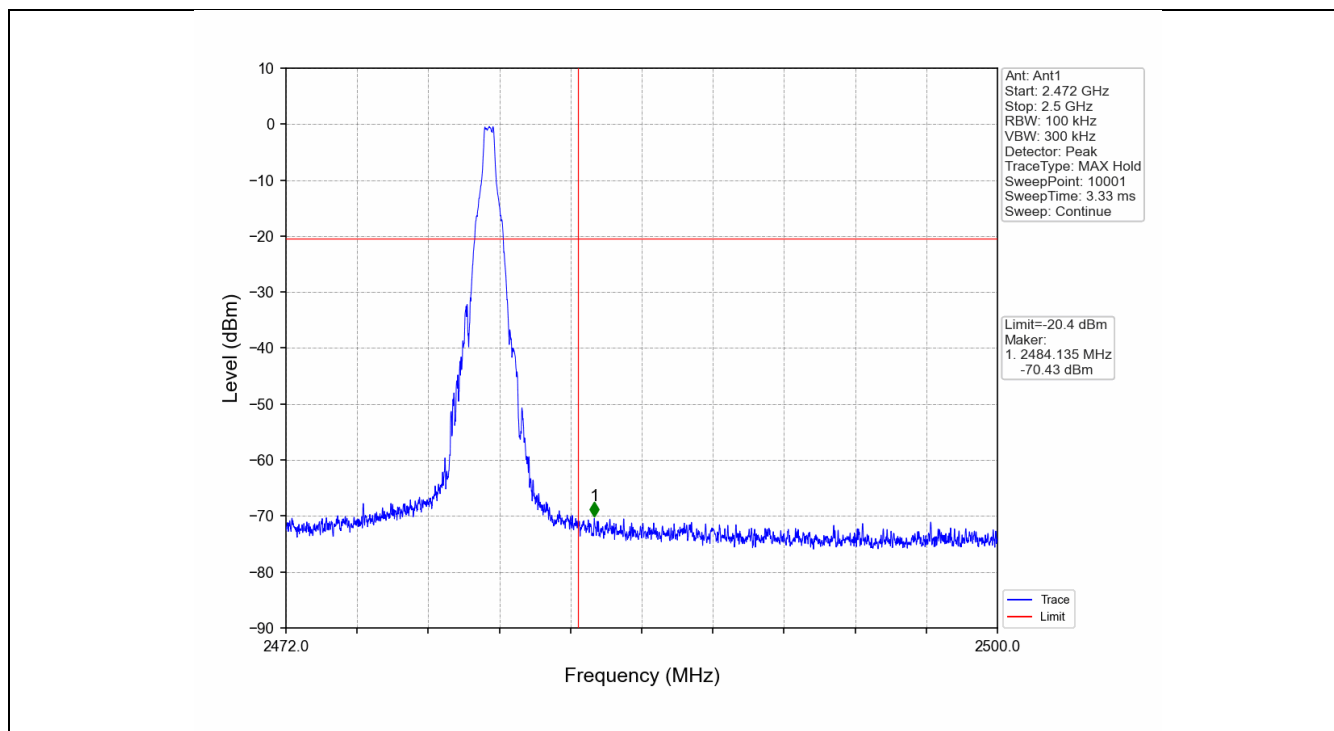
Mode	TX Type	Frequency (MHz)	Packet Type	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-0.40	-20.40	Pass
		2441	DH5	1	-0.40	-20.40	Pass
		2480	DH5	1	-0.40	-20.40	Pass
		HOPP	DH5	1	-0.40	-20.40	Pass
PI/4DQPSK	SISO	2402	2DH5	1	-7.91	-27.91	Pass
		2441	2DH5	1	-7.91	-27.91	Pass
		2480	2DH5	1	-7.91	-27.91	Pass
		HOPP	2DH5	1	-7.91	-27.91	Pass
8DPSK	SISO	2402	3DH5	1	0.71	-19.29	Pass
		2441	3DH5	1	0.71	-19.29	Pass
		2480	3DH5	1	0.71	-19.29	Pass
		HOPP	3DH5	1	0.71	-19.29	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

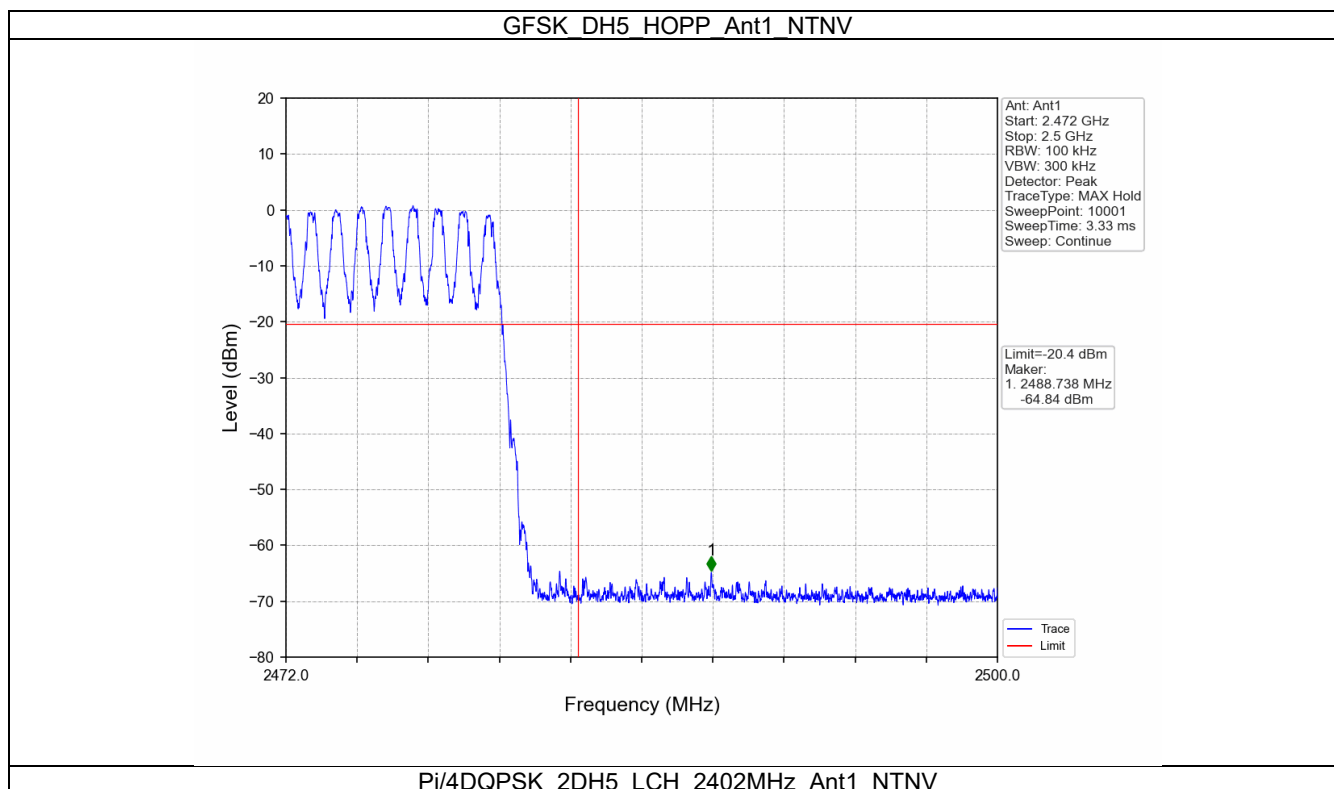
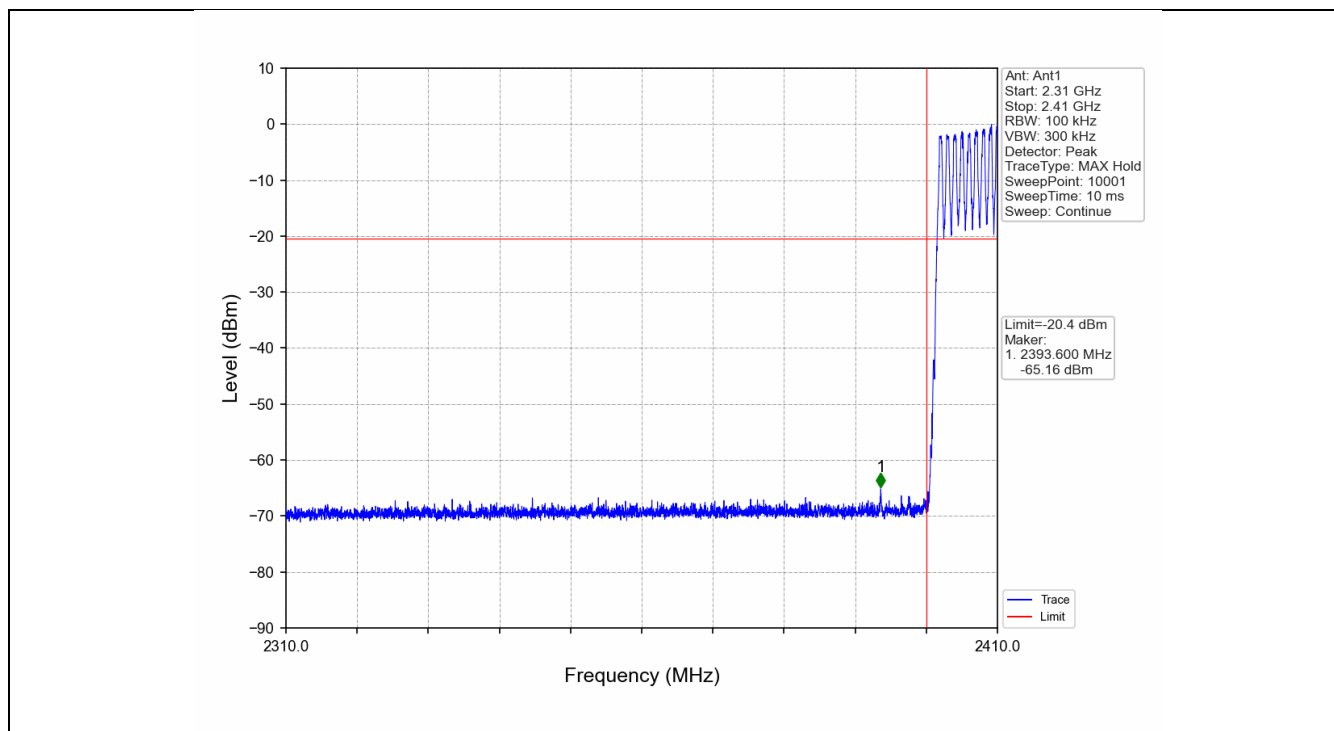
6.2.2 Test Graph

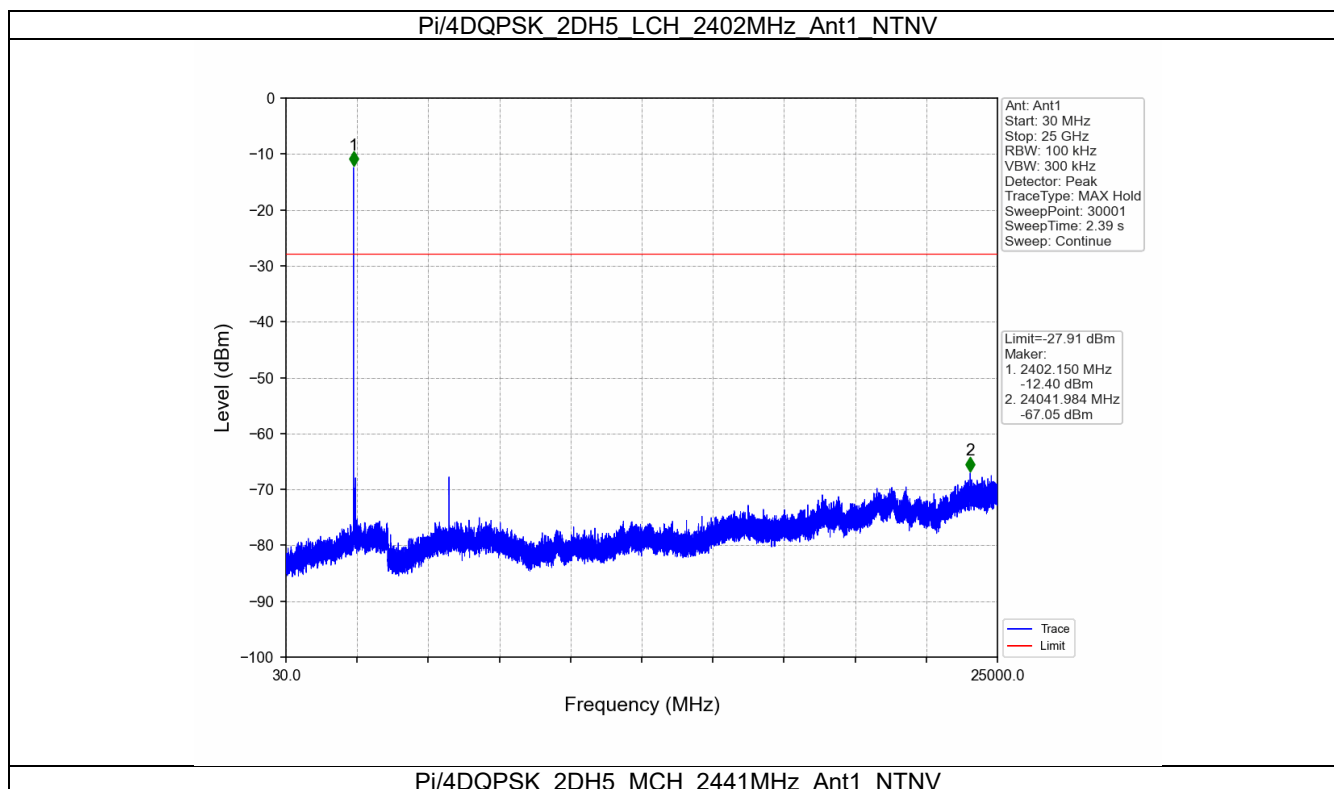
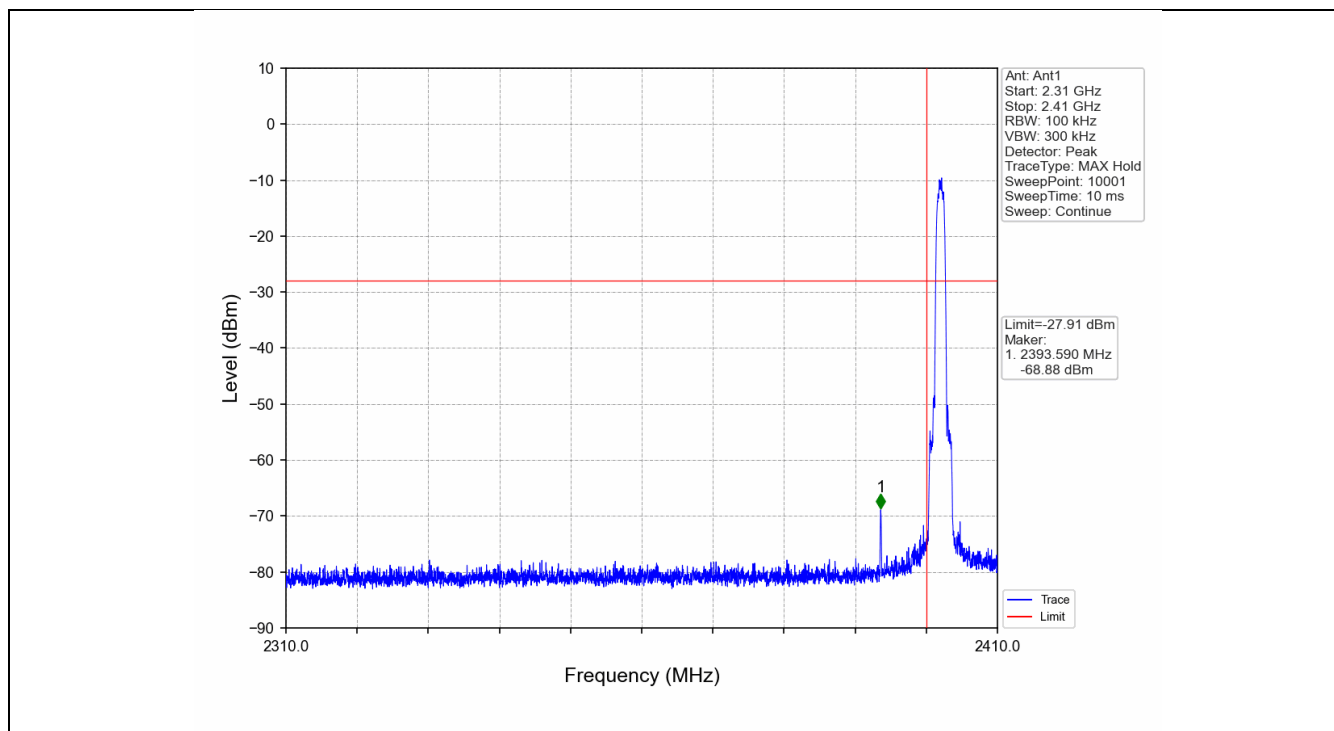


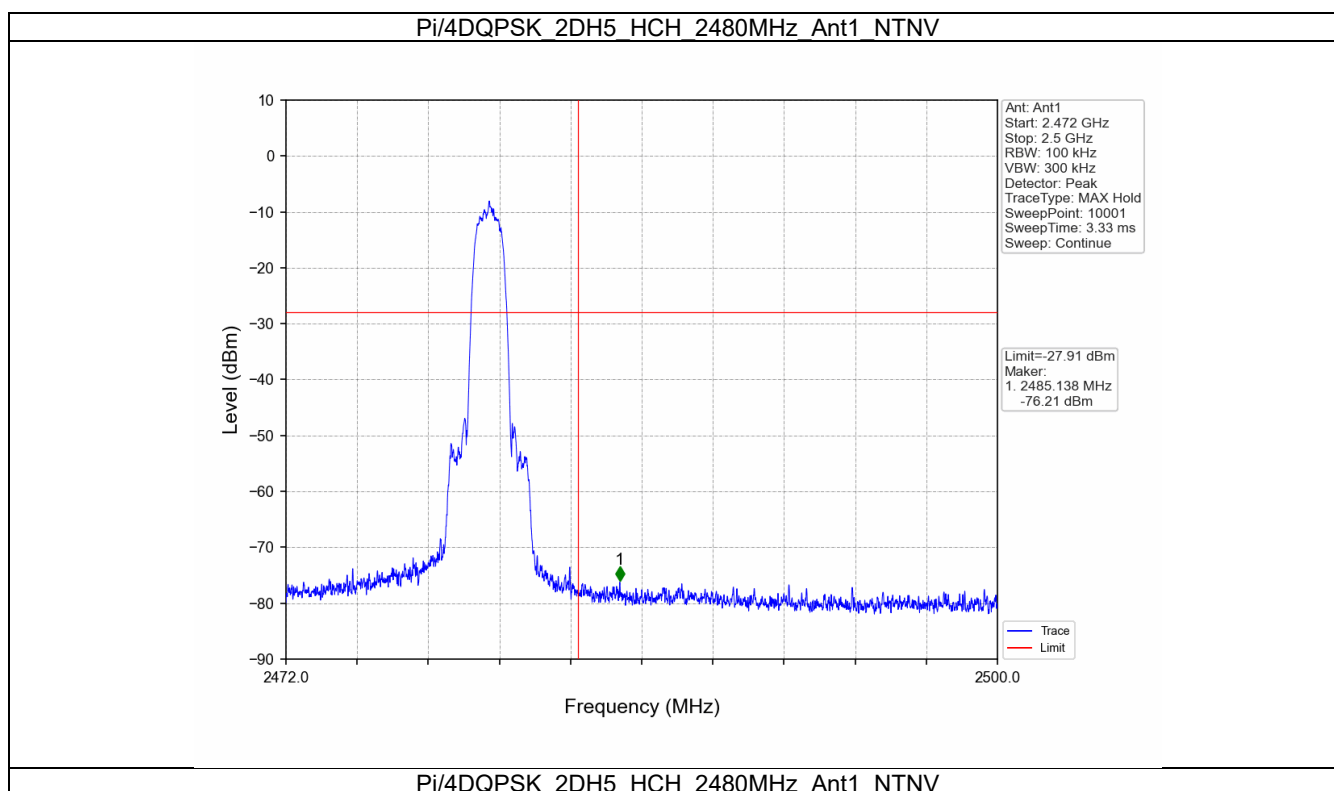
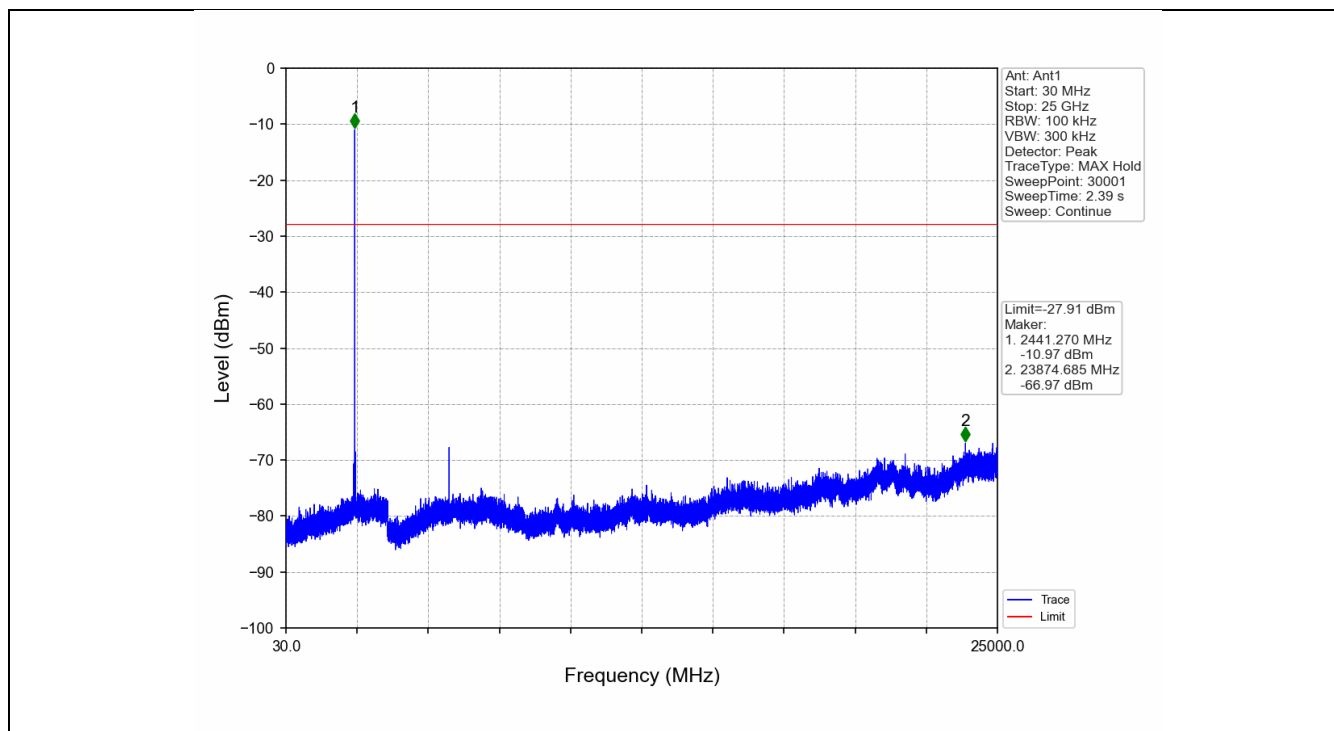


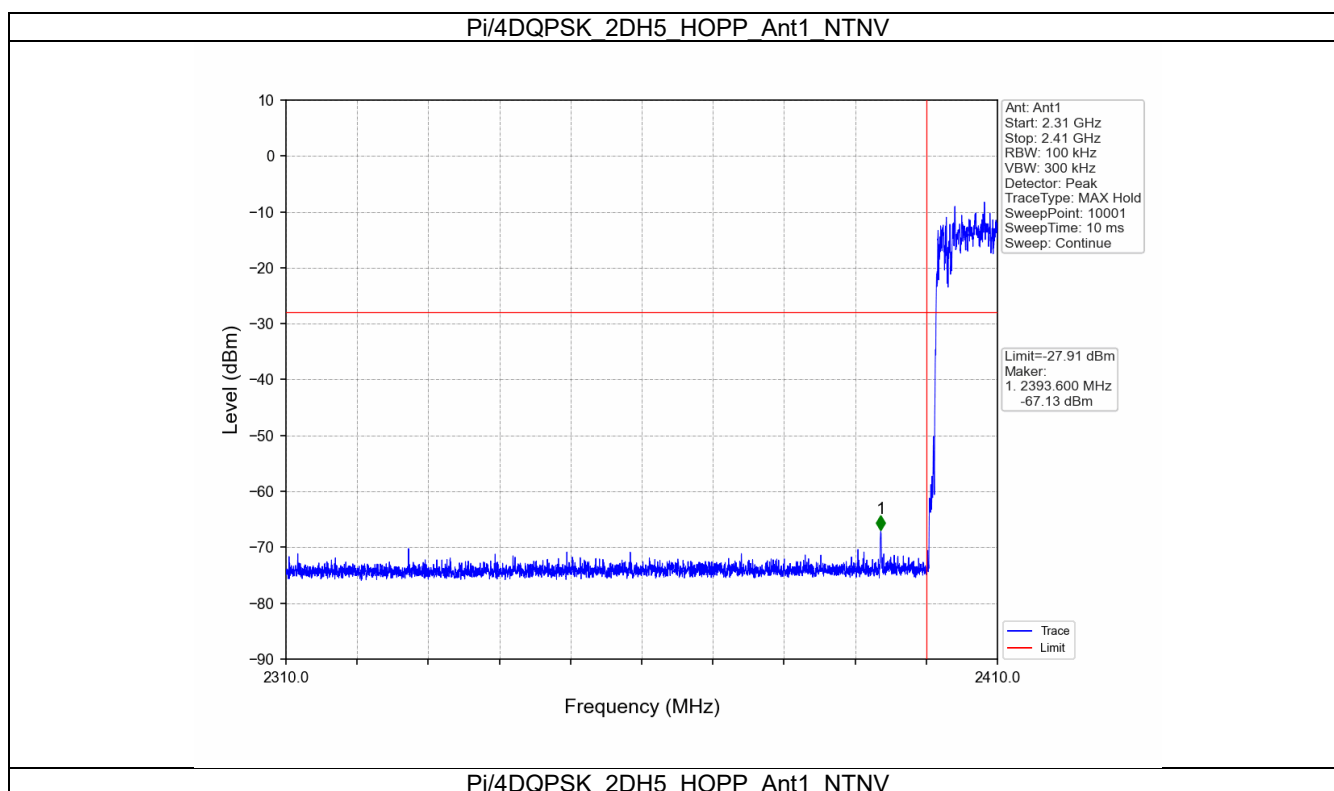
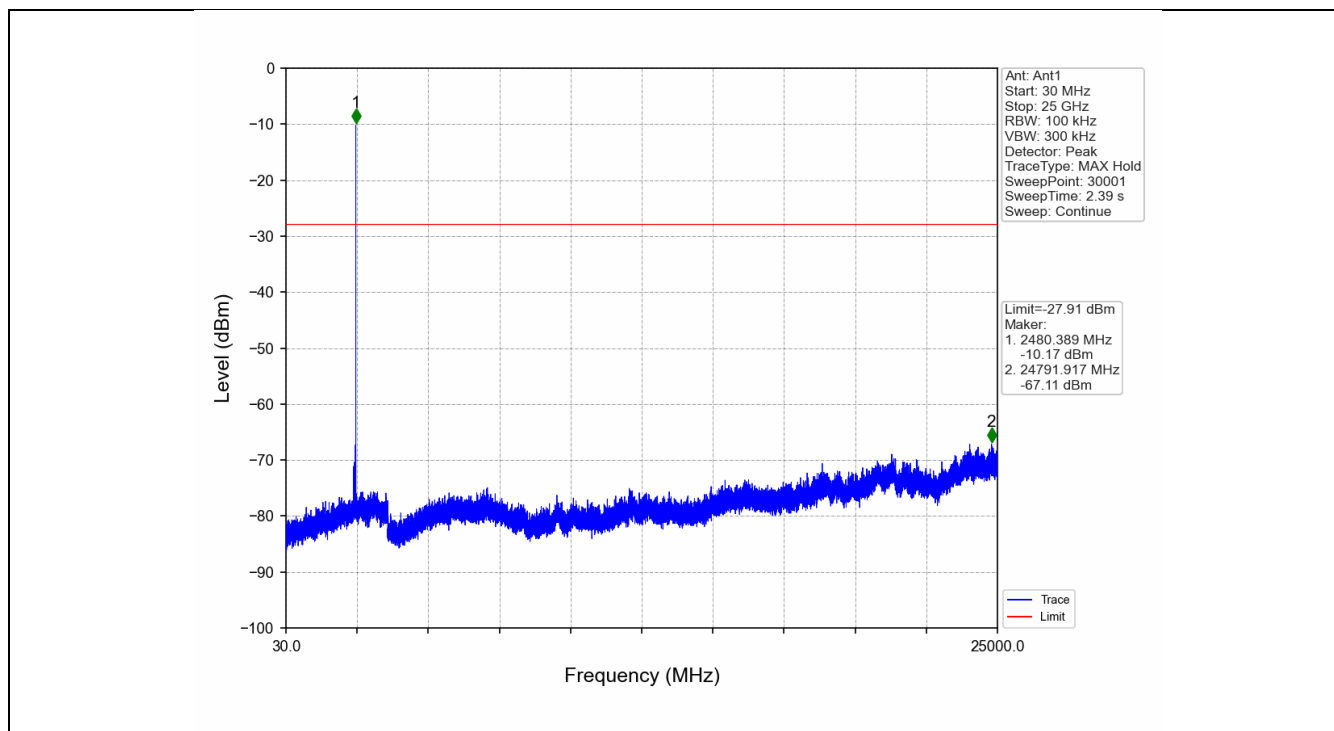


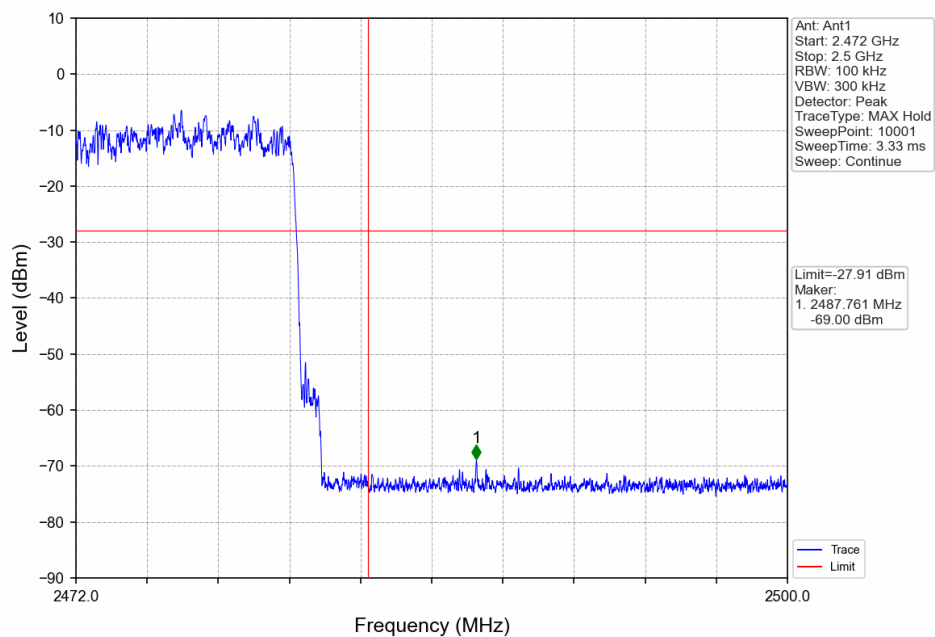
GFSK DH5 HOPP Ant1 NTN



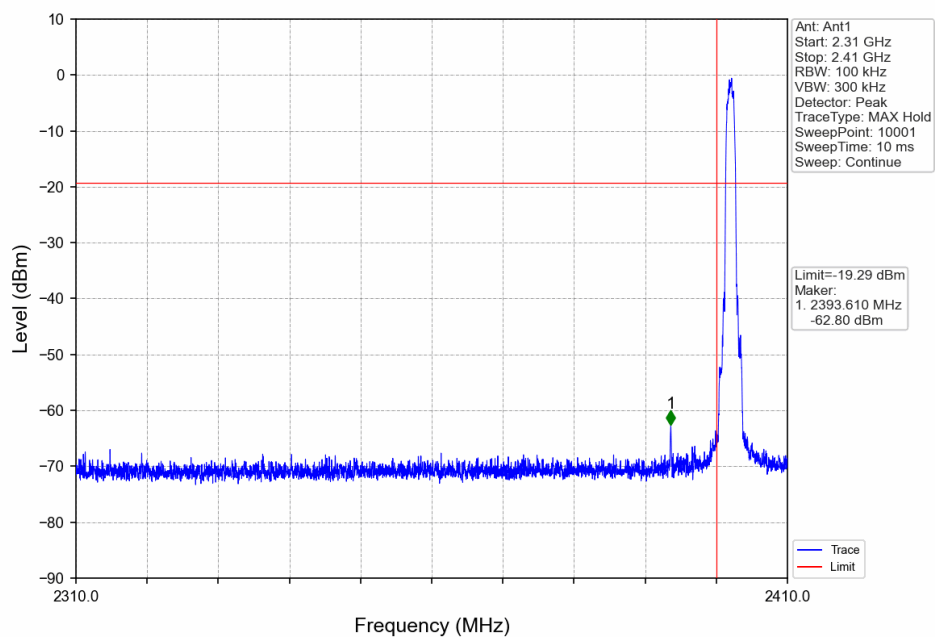




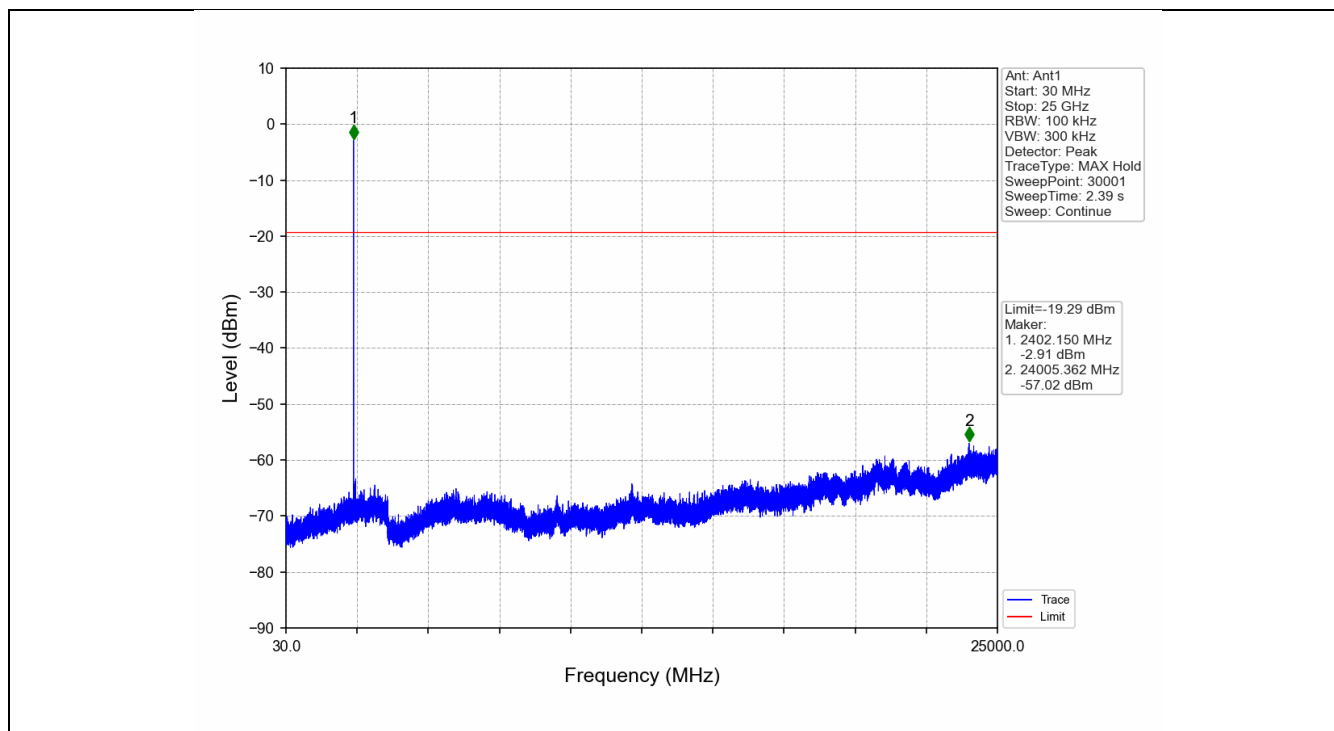




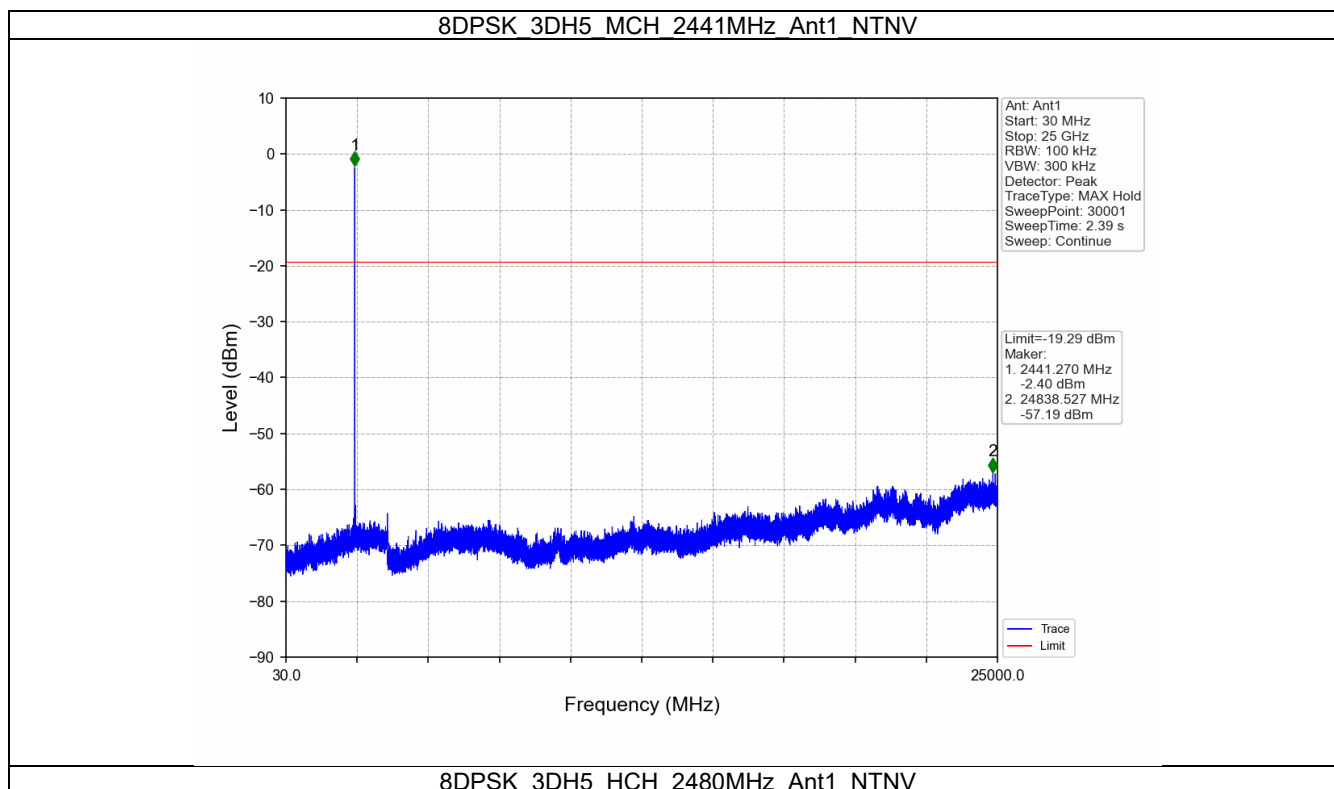
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



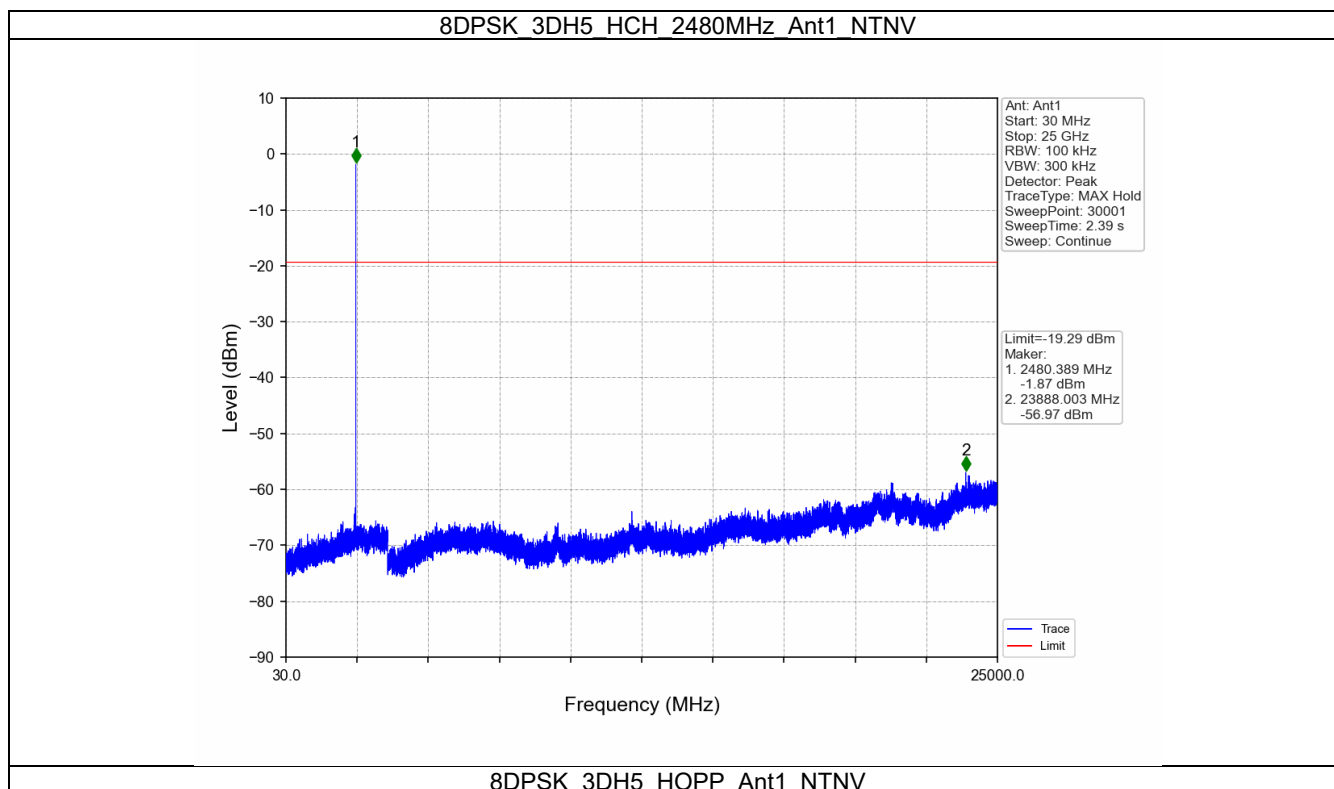
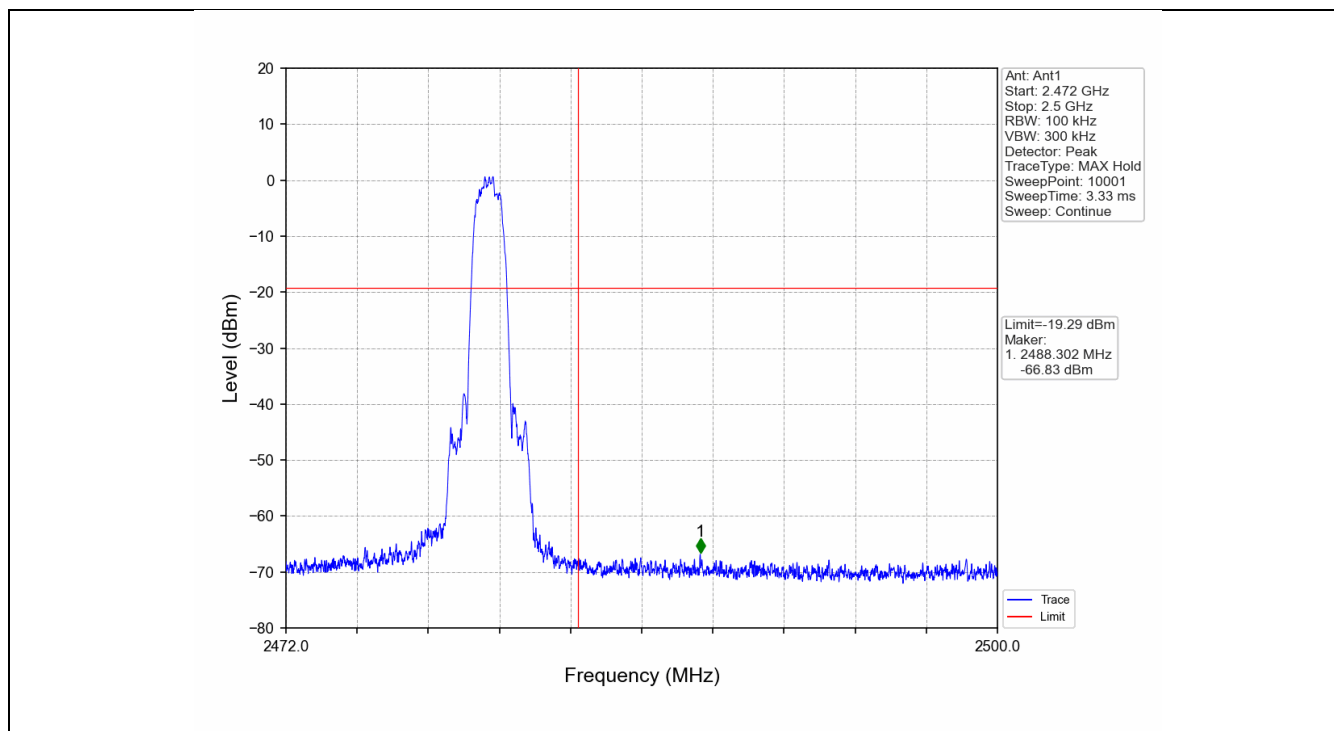
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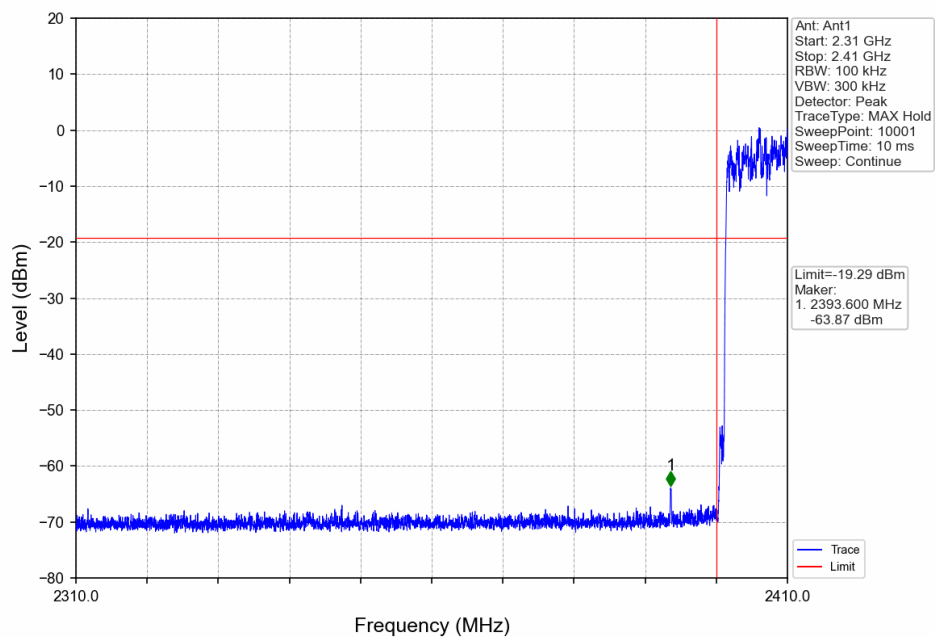


8DPSK 3DH5 MCH 2441MHz Ant1 NTN



8DPSK 3DH5 HCH 2480MHz Ant1 NTN





8DPSK 3DH5 HOPP Ant1 NTN

